

Chapter 02 Systems Design: Job-Order Costing

True / False Questions

1. Job-order costing would be more likely to be used than process costing in situations where many different products or services are produced each period to customer specifications.

True False

2. In a job-order costing system, costs are traced to departments and then allocated to units of product using an average process.

True False

3. Job-order costing is used in those situations where units of a product are homogeneous, such as in the manufacture of sugar.

True False

4. Job-order costing is usually not used in service organizations such as hospitals and law firms.

True False

5. The three cost categories appearing on a job cost sheet are: selling expense, manufacturing expense, and administrative expense.

True False

6. The labor time ticket contains the details of how much time an employee takes on each task throughout the day.

True False

7. In order to improve the accuracy of unit costs, most companies recompute the predetermined overhead rate each month.

True False

8. Use of a single, plantwide overhead rate is generally appropriate only for very large manufacturing companies.

True False

9. Predetermined overhead rates are based on actual cost and activity data.

True False

10. The following journal entry would be made to apply overhead cost to jobs in a job-order costing system:

Work in Process	XXX	
 Manufacturing Overhead		XXX

True False

11. When completed goods are sold, the transaction is recorded as a debit to Cost of Goods Sold and a credit to Work in Process.

True False

12. When the predetermined overhead rate is based on direct labor-hours, the amount of overhead applied to a job is proportional to the amount of actual direct labor-hours incurred on the job.

True False

13. Actual manufacturing overhead costs are traced to specific jobs.

True False

14. A credit balance in the Manufacturing Overhead account at the end of the year means that overhead was underapplied.

True False

15. The sum of all amounts transferred from the Work in Process account and into the Finished Goods account represents the Cost of Goods Manufactured for the period.

True False

16. The most common accounting treatment of underapplied manufacturing overhead is to transfer it to the Manufacturing Overhead control account.

True False

Multiple Choice Questions

17. Which of the following companies would be most likely to use a job-order costing system rather than a process costing system?

- A. fast food restaurant
- B. shipbuilding
- C. crude oil refining
- D. candy making

18. Computing unit product costs involves averaging in:

	Job-order costing	Process costing
A)	Yes	No
B)	Yes	Yes
C)	No	Yes
D)	No	No

- A. A
- B. B
- C. C
- D. D

19. For which situation(s) below would an organization be more likely to use a job-order costing system of accumulating product costs rather than a process costing system?

- A. a steel factory that processes iron ore into steel bars
- B. a factory that processes sugar and other ingredients into black licorice
- C. a costume maker that makes specialty costumes for figure skaters
- D. all of the above

20. In job-order costing, all of the following statements are correct with respect to labor time and cost except:

- A. time tickets are kept by employees showing the amount of work on specific jobs.
- B. the job cost sheet for a job will contain all direct labor charges to that particular job.
- C. labor cost that can be traced to a job only with a great deal of effort is treated as part of manufacturing overhead.
- D. a machine operator performing routine annual maintenance work on a piece of equipment would charge the maintenance time to a specific job.

21. Which of the following documents is used to specify the type and quantity of materials drawn from the storeroom, and identifies the job to which the costs of the materials are to be charged?

- A. Job Cost Sheet
- B. Bill of Materials
- C. Material Requisition Form
- D. Purchase Order

22. Choice of allocation base should be made based on:

- A. the relative size of the base.
- B. the base's relation to direct labor.
- C. the base's activity.
- D. whether the base actually drives the cost being allocated.

23. In a job-order costing system, the journal entry to record the application of overhead cost to jobs would include:

- A. a credit to the Manufacturing Overhead account.
- B. a credit to the Work in Process inventory account.
- C. a debit to Cost of Goods Sold.
- D. a debit to the Manufacturing Overhead account.

24. Ivory Company uses a job-order costing system. What year-end journal entry could Ivory make to dispose of (close out) \$4,150 of overapplied manufacturing overhead cost?

A) Finished Goods	\$4,150	
Manufacturing Overhead		\$4,150
B) Cost of Goods Sold	\$4,150	
Manufacturing Overhead		\$4,150
C) Manufacturing Overhead	\$4,150	
Finished Goods		\$4,150
D) Manufacturing Overhead	\$4,150	
Cost of Goods Sold		\$4,150

- A. A
- B. B
- C. C
- D. D

25. In a job-order costing system, the use of indirect materials would usually be recorded as a debit to:

- A. Raw Materials.
- B. Work in Process.
- C. Manufacturing Overhead.
- D. Finished Goods.

26. In a job-order costing system, direct labor costs usually are recorded initially with a debit to:

- A. Manufacturing Overhead.
- B. Finished Goods inventory.
- C. Direct Labor Expense.
- D. Work in Process.

27. In a job-order costing system, the entry to record depreciation on manufacturing equipment would include:

- A. a debit to the Work in Process inventory account.
- B. a debit to the Depreciation Expense account.
- C. a debit to the Manufacturing Overhead account.
- D. a credit to the Work in Process inventory account.

28. Which of the following accounts is debited when indirect labor is recorded?

- A. Work in Process
- B. Salaries and Wages Expense
- C. Salaries and Wages Payable
- D. Manufacturing Overhead

29. When applying manufacturing overhead to jobs, the formula to calculate the amount is as follows:

- A. Predetermined overhead rate divided by the actual manufacturing overhead incurred on the particular job.
- B. Predetermined overhead rate times the actual manufacturing overhead incurred on the particular job.
- C. Predetermined overhead rate divided by the actual units of allocation base charged to the particular job.
- D. Predetermined overhead rate times the actual units of allocation base charged to the particular job.

30. In a job-order costing system, the amount of overhead cost that has been applied to a job that remains incomplete at the end of a period:

- A. is deducted on the Income Statement as overapplied overhead.
- B. is closed to Cost of Goods Sold.
- C. is transferred to Finished Goods at the end of the period.
- D. is part of the ending balance of the Work in Process inventory account.

31. If a company applies overhead to jobs on the basis of a predetermined overhead rate, a credit balance in the Manufacturing Overhead account at the end of any period means that:
- A. more overhead cost has been charged to jobs than has been incurred during the period.
 - B. more overhead cost has been incurred during the period than has been charged to jobs.
 - C. the amount of overhead cost charged to jobs is greater than the estimated cost for the period.
 - D. the amount of overhead cost charged to jobs is less than the estimated overhead cost for the period.
32. Which of the following situations always results in underapplied overhead?
- A. actual overhead is greater than applied overhead
 - B. actual overhead is less than applied overhead
 - C. estimated overhead is greater than actual overhead
 - D. estimated overhead is less than actual overhead
33. When closing overapplied manufacturing overhead to cost of goods sold, which of the following would be true?
- A. Work in process will decrease.
 - B. Cost of goods sold will increase.
 - C. Net income will decrease.
 - D. Gross margin will increase.
34. The Work in Process inventory account of a manufacturing company shows a balance of \$2,400 at the end of an accounting period. The job cost sheets of the two uncompleted jobs show charges of \$400 and \$200 for direct materials, and charges of \$300 and \$500 for direct labor. From this information, it appears that the company is using a predetermined overhead rate, as a percentage of direct labor costs, of:
- A. 80%
 - B. 125%
 - C. 300%
 - D. 240%

35. Job 607 was recently completed. The following data have been recorded on its job cost sheet:

Direct materials	\$3,405	
Direct labor-hours	54	labor-hours
Direct labor wage rate	\$13	per labor-hour
Machine-hours	158	machine-hours

The company applies manufacturing overhead on the basis of machine-hours. The predetermined overhead rate is \$14 per machine-hour. The total cost that would be recorded on the job cost sheet for Job 607 would be:

- A. \$4,107
- B. \$6,319
- C. \$3,432
- D. \$4,863

36. The following data have been recorded for recently completed Job 501 on its job cost sheet. Direct materials cost was \$3,067. A total of 30 direct labor-hours and 104 machine-hours were worked on the job. The direct labor wage rate is \$12 per labor-hour. The company applies manufacturing overhead on the basis of machine-hours. The predetermined overhead rate is \$11 per machine-hour. The total cost for the job on its job cost sheet would be:

- A. \$4,571
- B. \$3,757
- C. \$3,090
- D. \$3,427

37. Freeman Company uses a predetermined overhead rate based on direct labor-hours to apply manufacturing overhead to jobs. At the beginning of the year, the company estimated manufacturing overhead would be \$150,000 and direct labor-hours would be 10,000. The actual figures for the year were \$186,000 for manufacturing overhead and 12,000 direct labor-hours. The cost records for the year will show:

- A. overapplied overhead of \$30,000
- B. underapplied overhead of \$30,000
- C. underapplied overhead of \$6,000
- D. overapplied overhead of \$6,000

38. Harrell Company uses a predetermined overhead rate based on direct labor-hours to apply manufacturing overhead to jobs. At the beginning of the year the company estimated its total manufacturing overhead cost at \$400,000 and its direct labor-hours at 100,000 hours. The actual overhead cost incurred during the year was \$350,000 and the actual direct labor-hours incurred on jobs during the year was 90,000 hours. The manufacturing overhead for the year would be:

- A. \$10,000 underapplied
- B. \$10,000 overapplied
- C. \$50,000 underapplied
- D. \$50,000 overapplied

39. For the current year, Paxman Company incurred \$150,000 in actual manufacturing overhead cost. The Manufacturing Overhead account showed that overhead was overapplied in the amount of \$6,000 for the year. If the predetermined overhead rate was \$8.00 per direct labor-hour, how many hours were worked during the year?

- A. 19,500 hours
- B. 18,000 hours
- C. 18,750 hours
- D. 17,750 hours

40. At the beginning of the year, manufacturing overhead for the year was estimated to be \$702,450. At the end of the year, actual direct labor-hours for the year were 33,100 hours, the actual manufacturing overhead for the year was \$697,450, and manufacturing overhead for the year was overapplied by \$40,680. If the predetermined overhead rate is based on direct labor-hours, then the estimated direct labor-hours at the beginning of the year used in the predetermined overhead rate must have been:

- A. 31,500 direct labor-hours
- B. 29,452 direct labor-hours
- C. 31,276 direct labor-hours
- D. 33,100 direct labor-hours

41. Brabo Corporation uses direct labor-hours in its predetermined overhead rate. At the beginning of the year, the estimated direct labor-hours were 15,700 hours. At the end of the year, actual direct labor-hours for the year were 16,700 hours, the actual manufacturing overhead for the year was \$352,960, and manufacturing overhead for the year was overapplied by \$27,800. The estimated manufacturing overhead at the beginning of the year used in the predetermined overhead rate must have been:

- A. \$327,124
- B. \$357,960
- C. \$380,760
- D. \$347,960

42. Crimp Corporation uses direct labor-hours in its predetermined overhead rate. At the beginning of the year, the estimated direct labor-hours were 15,000 hours and the total estimated manufacturing overhead was \$258,000. At the end of the year, actual direct labor-hours for the year were 13,100 hours and the actual manufacturing overhead for the year was \$253,000. Overhead at the end of the year was:

- A. \$27,680 overapplied
- B. \$32,680 overapplied
- C. \$27,680 underapplied
- D. \$32,680 underapplied

43. Dagnon Corporation uses direct labor-hours in its predetermined overhead rate. At the beginning of the year, the total estimated manufacturing overhead was \$299,130. At the end of the year, actual direct labor-hours for the year were 17,400 hours, manufacturing overhead for the year was overapplied by \$13,850, and the actual manufacturing overhead was \$294,130. The predetermined overhead rate for the year must have been closest to:

- A. \$17.70
- B. \$17.19
- C. \$18.22
- D. \$16.90

44. The Watts Company uses predetermined overhead rates to apply manufacturing overhead to jobs. The predetermined overhead rate is based on labor cost in Dept. A and on machine-hours in Dept. B. At the beginning of the year, the company made the following estimates:

	Dept A	Dept B
Direct labor cost	\$30,000	\$40,000
Manufacturing overhead	\$60,000	\$50,000
Direct labor-hours	6,000	8,000
Machine-hours	2,000	10,000

What predetermined overhead rates would be used in Dept A and Dept B, respectively?

- A. 50% and \$8.00
- B. 50% and \$5.00
- C. \$15 and 110%
- D. 200% and \$5.00

45. Simplex Company has the following estimated costs for next year:

Direct materials	\$15,000
Direct labor	\$55,000
Sales commissions	\$75,000
Salary of production supervisor	\$35,000
Indirect materials	\$5,000
Advertising expense	\$11,000
Rent on factory equipment	\$16,000

Simplex estimates that 10,000 direct labor and 16,000 machine-hours will be worked during the year. If overhead is applied on the basis of machine-hours, the overhead rate per hour will be:

- A. \$8.56
- B. \$7.63
- C. \$6.94
- D. \$3.50

46. The balance in White Company's Work in Process inventory account was \$15,000 on August 1 and \$18,000 on August 31. The company incurred \$30,000 in direct labor cost during August and requisitioned \$25,000 in raw materials (all direct material). If the sum of the debits to the Manufacturing Overhead account total \$28,000 for the month, and if the sum of the credits totaled \$30,000, then:

- A. Finished Goods was debited for \$82,000 during the month.
- B. Finished Goods was credited for \$83,000 during the month.
- C. Manufacturing Overhead was underapplied by \$2,000 at the end of the month.
- D. Finished Goods was debited for \$85,000 during the month.

47. Melillo Corporation has provided data concerning the company's Manufacturing Overhead account for the month of October. Prior to the closing of the overapplied or underapplied balance to Cost of Goods Sold, the total of the debits to the Manufacturing Overhead account was \$67,000 and the total of the credits to the account was \$57,000. Which of the following statements is true?

- A. Manufacturing overhead for the month was overapplied by \$10,000.
- B. Actual manufacturing overhead for the month was \$67,000.
- C. Manufacturing overhead applied to Work in Process for the month was \$67,000.
- D. Manufacturing overhead transferred from Finished Goods to Cost of Goods Sold during the month was \$57,000.

48. Waldvogel Corporation has provided data concerning the company's Manufacturing Overhead account for the month of April. Prior to the closing of the overapplied or underapplied balance to Cost of Goods Sold, the total of the debits to the Manufacturing Overhead account was \$55,000 and the total of the credits to the account was \$56,000. Which of the following statements is true?

- A. Manufacturing overhead for the month was underapplied by \$1,000.
- B. Manufacturing overhead applied to Work in Process for the month was \$56,000.
- C. Actual manufacturing overhead incurred during the month was \$56,000.
- D. Manufacturing overhead transferred from Finished Goods to Cost of Goods Sold during the month was \$55,000.

49. Danoff Corporation has provided data concerning the company's Manufacturing Overhead account for the month of October. Prior to the closing of the overapplied or underapplied balance to Cost of Goods Sold, the total of the debits to the Manufacturing Overhead account was \$68,000 and the total of the credits to the account was \$77,000. Which of the following statements is true?

- A. Actual manufacturing overhead incurred during the month was \$77,000.
- B. Manufacturing overhead applied to Work in Process for the month was \$68,000.
- C. Manufacturing overhead transferred from Finished Goods to Cost of Goods Sold during the month was \$68,000.
- D. Manufacturing overhead for the month was overapplied by \$9,000.

50. On December 1, Catherman Corporation had \$21,000 of raw materials on hand. During the month, the company purchased an additional \$61,000 of raw materials. During December, \$70,000 of raw materials were requisitioned from the storeroom for use in production. The debits to the Raw Materials account for the month of December total:

- A. \$82,000
- B. \$70,000
- C. \$61,000
- D. \$21,000

51. At the beginning of October, Cozier Corporation had \$34,000 of raw materials on hand. During the month, the company purchased an additional \$78,000 of raw materials. During October, \$92,000 of raw materials were requisitioned from the storeroom for use in production. The credits to the Raw Materials account for the month of October total:

- A. \$92,000
- B. \$34,000
- C. \$78,000
- D. \$112,000

52. McMackin Corporation had \$35,000 of raw materials on hand on August 1. During the month, the company purchased an additional \$66,000 of raw materials. During August, \$81,000 of raw materials were requisitioned from the storeroom for use in production. These raw materials included both direct and indirect materials. The indirect materials totaled \$7,000. The debits to the Work in Process account as a consequence of the raw materials transactions in August total:

- A. \$66,000
- B. \$0
- C. \$74,000
- D. \$81,000

53. During August at Schlappi Corporation, \$80,000 of raw materials were requisitioned from the storeroom for use in production. These raw materials included both direct and indirect materials. The indirect materials totaled \$2,000. The journal entry to record this requisition would include a debit to Manufacturing Overhead of:

- A. \$2,000
- B. \$80,000
- C. \$78,000
- D. \$0

54. Hards Corporation had \$38,000 of raw materials on hand on September 1. During the month, the company purchased an additional \$54,000 of raw materials. The journal entry to record the purchase of raw materials would include a:

- A. debit to Raw Materials of \$54,000
- B. debit to Raw Materials of \$92,000
- C. credit to Raw Materials of \$92,000
- D. credit to Raw Materials of \$54,000

55. During May at Landreth Corporation, \$81,000 of raw materials were requisitioned from the storeroom for use in production. These raw materials included both direct and indirect materials. The indirect materials totaled \$7,000. The journal entry to record the requisition from the storeroom would include a:

- A. debit to Raw Materials of \$81,000
- B. debit to Work in Process of \$81,000
- C. credit to Manufacturing Overhead of \$7,000
- D. debit to Work in Process of \$74,000

56. In December, Perone Inc. incurred \$78,000 of direct labor costs and \$4,000 of indirect labor costs. The journal entry to record the accrual of these wages would include a:

- A. debit to Work in Process of \$82,000
- B. debit to Manufacturing Overhead of \$4,000
- C. credit to Work in Process of \$82,000
- D. credit to Manufacturing Overhead of \$4,000

57. Inks Corporation incurred \$69,000 of actual Manufacturing Overhead costs during June. During the same period, the Manufacturing Overhead applied to Work in Process was \$70,000. The journal entry to record the incurrence of the actual Manufacturing Overhead costs would include a:

- A. debit to Manufacturing Overhead of \$69,000
- B. debit to Work in Process of \$70,000
- C. credit to Manufacturing Overhead of \$69,000
- D. credit to Work in Process of \$70,000

58. Mincks Corporation incurred \$64,000 of actual Manufacturing Overhead costs during November. During the same period, the Manufacturing Overhead applied to Work in Process was \$61,000. The journal entry to record the application of Manufacturing Overhead to Work in Process would include a:

- A. debit to Work in Process of \$64,000
- B. credit to Manufacturing Overhead of \$61,000
- C. credit to Work in Process of \$64,000
- D. debit to Manufacturing Overhead of \$61,000

59. During October, Kreitner Inc. transferred \$73,000 from Work in Process to Finished Goods and recorded a Cost of Goods Sold of \$76,000. The journal entries to record these transactions would include a:

- A. credit to Work in Process of \$73,000
- B. credit to Cost of Goods Sold of \$76,000
- C. debit to Finished Goods of \$76,000
- D. credit to Finished Goods of \$73,000

60. During December, Fleeger Corporation incurred \$51,000 of direct labor costs and \$5,000 of indirect labor costs. The journal entry to record the accrual of these wages would include a:

- A. debit to Work in Process of \$56,000
- B. credit to Work in Process of \$51,000
- C. debit to Work in Process of \$51,000
- D. credit to Work in Process of \$56,000

61. Lucy Sportswear manufactures a specialty line of T-shirts. The company uses a job-order costing system. During March, the following costs were incurred on Job ICU2: direct materials \$13,700 and direct labor \$4,800. In addition, selling and shipping costs of \$7,000 were incurred on the job. Manufacturing overhead was applied at the rate of \$25 per machine-hour and Job ICU2 required 800 machine-hours. If Job ICU2 consisted of 7,000 shirts, the Cost of Goods Sold per shirt was:

- A. \$6.50
- B. \$6.00
- C. \$5.70
- D. \$5.50

62. Pricton Corporation has a job-order costing system. For the month of April, the following debits (credits) appeared in the Work in Process account:

April 1	Balance.....	\$12,000
April 30	Direct materials	\$40,000
April 30	Direct labor	\$30,000
April 30	Manufacturing overhead	\$27,000
April 30	To finished goods	(\$100,000)

Pricton applies overhead at a predetermined rate of 90% of direct labor cost. Job No. 50, the only job still in process at the end of April, has been charged with manufacturing overhead of \$2,250. The amount of direct materials charged to Job No. 50 was:

- A. \$9,000
- B. \$4,250
- C. \$2,500
- D. \$2,250

63. Beaver Company used a predetermined overhead rate last year of \$2 per direct labor-hour, based on an estimate of 25,000 direct labor-hours to be worked during the year. Actual costs and activity during the year were:

Actual manufacturing overhead cost incurred	\$47,000
Actual direct labor-hours worked	24,000

The underapplied or overapplied overhead last year was:

- A. \$1,000 underapplied
- B. \$1,000 overapplied
- C. \$3,000 overapplied
- D. \$2,000 underapplied

64. Paul Company used a predetermined overhead rate during the year just completed of \$3.50 per direct labor-hour, based on an estimate of 22,000 direct labor-hours to be worked during the year. Actual overhead cost and activity during the year were:

Actual manufacturing overhead cost incurred	\$90,000
Actual direct labor-hours worked	25,000

The underapplied or overapplied overhead for the year would be:

- A. \$13,000 underapplied
- B. \$10,500 overapplied
- C. \$2,500 overapplied
- D. \$2,500 underapplied

65. Sweet Company applies overhead to jobs on the basis of 125% of direct labor cost. If Job 107 shows \$10,000 of manufacturing overhead applied, how much was the direct labor cost on the job?

- A. \$8,000
- B. \$12,500
- C. \$11,250
- D. \$10,000

66. Pitzer Corporation, a manufacturing company, has provided data concerning its operations for March. The beginning balance in the raw materials account was \$29,000 and the ending balance was \$38,000. Raw materials purchases during the month totaled \$74,000.

Manufacturing overhead cost incurred during the month was \$106,000, of which \$7,000 consisted of raw materials classified as indirect materials. The direct materials cost for March was:

- A. \$83,000
- B. \$58,000
- C. \$74,000
- D. \$65,000

67. Jarratt Inc., a manufacturing company, has provided the following data for the month of September. The balance in the Work in Process inventory account was \$21,000 at the beginning of the month and \$24,000 at the end of the month. During the month, the company incurred direct materials cost of \$69,000 and direct labor cost of \$31,000. The actual manufacturing overhead cost incurred was \$54,000. The manufacturing overhead cost applied to Work in Process was \$58,000. The cost of goods manufactured for September was:

- A. \$158,000
- B. \$154,000
- C. \$151,000
- D. \$155,000

68. Erholm Inc. has provided the following data for the month of March. The balance in the Finished Goods inventory account at the beginning of the month was \$43,000 and at the end of the month was \$42,000. The cost of goods manufactured for the month was \$221,000. The actual manufacturing overhead cost incurred was \$45,000 and the manufacturing overhead cost applied to Work in Process was \$49,000. Assuming that the balance in the Manufacturing Overhead Account is reduced to zero, the adjusted cost of goods sold that would appear on the income statement for March is:

- A. \$218,000
- B. \$220,000
- C. \$222,000
- D. \$221,000

69. The following data have been provided by a company:

	Balance	Balance
Inventories	November 1	November 30
Raw materials	\$4,000	\$3,000
Work in process	\$12,000	\$15,000
Finished goods	\$24,000	\$27,000

Compute the amount of direct materials used during November if \$20,000 in raw materials were purchased during the month.

- A. \$21,000
- B. \$19,000
- C. \$18,000
- D. \$15,000

70. The actual manufacturing overhead incurred at Huberty Corporation during January was \$73,000, while the manufacturing overhead applied to Work in Process was \$78,000. The company's Cost of Goods Sold was \$349,000 prior to closing out its Manufacturing Overhead account. The company closes out its Manufacturing Overhead account to Cost of Goods Sold. Which of the following statements is true?

- A. Manufacturing overhead was overapplied by \$5,000; Cost of Goods Sold after closing out the Manufacturing Overhead account is \$354,000
- B. Manufacturing overhead was underapplied by \$5,000; Cost of Goods Sold after closing out the Manufacturing Overhead account is \$344,000
- C. Manufacturing overhead was underapplied by \$5,000; Cost of Goods Sold after closing out the Manufacturing Overhead account is \$354,000
- D. Manufacturing overhead was overapplied by \$5,000; Cost of Goods Sold after closing out the Manufacturing Overhead account is \$344,000

71. Molano Corporation has provided the following data concerning manufacturing overhead for June:

Actual manufacturing overhead incurred	\$69,000
Manufacturing overhead applied to Work in Process	\$76,000

The company's Cost of Goods Sold was \$255,000 prior to closing out its Manufacturing Overhead account. The company closes out its Manufacturing Overhead account to Cost of Goods Sold. Which of the following statements is true?

- A. Manufacturing overhead was underapplied by \$7,000; Cost of Goods Sold after closing out the Manufacturing Overhead account is \$248,000
- B. Manufacturing overhead was overapplied by \$7,000; Cost of Goods Sold after closing out the Manufacturing Overhead account is \$248,000
- C. Manufacturing overhead was underapplied by \$7,000; Cost of Goods Sold after closing out the Manufacturing Overhead account is \$262,000
- D. Manufacturing overhead was overapplied by \$7,000; Cost of Goods Sold after closing out the Manufacturing Overhead account is \$262,000

Munos Publishing Company uses a job-order costing system to collect costs related to the manufacture of specialty publications for corporate training.

72. What journal entry would Munos make to record the application of \$1,200 of manufacturing overhead to Job KN672?

A) Work in Process	\$1,200	
Manufacturing Overhead		\$1,200
B) Cost of Goods Manufactured	\$1,200	
Manufacturing Overhead		\$1,200
C) Manufacturing Overhead	\$1,200	
Work in Process		\$1,200
D) Cost of Goods Manufactured	\$1,200	
Work in Process		\$1,200

- A. A
- B. B
- C. C
- D. D

73. What journal entry would Munos make to record the completion of Job KN668 at a total cost of \$7,600?

- | | | | |
|----|----------------------------|---------|---------|
| A) | Work in Process | \$7,600 | |
| | Finished Goods | | \$7,600 |
| B) | Cost of Goods Manufactured | \$7,600 | |
| | Work in Process | | \$7,600 |
| C) | Finished Goods | \$7,600 | |
| | Work in Process | | \$7,600 |
| D) | Cost of Goods Manufactured | \$7,600 | |
| | Finished Goods | | \$7,600 |

- A. A
- B. B
- C. C
- D. D

74. What journal entry would Munos make to record \$9,500 of depreciation on its printing presses?

- | | | | |
|----|--------------------------|---------|---------|
| A) | Work in Process | \$9,500 | |
| | Manufacturing Overhead | | \$9,500 |
| B) | Depreciation Expense | \$9,500 | |
| | Accumulated Depreciation | | \$9,500 |
| C) | Manufacturing Overhead | \$9,500 | |
| | Accumulated Depreciation | | \$9,500 |
| D) | Manufacturing Overhead | \$9,500 | |
| | Depreciation Expense | | \$9,500 |

- A. A
- B. B
- C. C
- D. D

Acer Corporation, which applies manufacturing overhead on the basis of machine-hours, has provided the following data for its most recent year of operations.

Estimated manufacturing overhead	\$224,550
Estimated machine-hours	4,500
Actual manufacturing overhead	\$224,000
Actual machine-hours	4,440

The estimates of the manufacturing overhead and of machine-hours were made at the beginning of the year for the purpose of computing the company's predetermined overhead rate for the year.

75. The predetermined overhead rate is closest to:

- A. \$49.23
- B. \$49.90
- C. \$49.78
- D. \$50.45

76. The applied manufacturing overhead for the year is closest to:

- A. \$218,581
- B. \$221,023
- C. \$223,998
- D. \$221,556

77. The overhead for the year was:

- A. \$2,994 underapplied
- B. \$2,444 overapplied
- C. \$2,444 underapplied
- D. \$2,994 overapplied

Baken Corporation applies manufacturing overhead on the basis of direct labor-hours. At the beginning of the most recent year, the company based its predetermined overhead rate on total estimated overhead of \$172,140 and 3,800 estimated direct labor-hours. Actual manufacturing overhead for the year amounted to \$171,000 and actual direct labor-hours were 3,880.

78. The predetermined overhead rate for the year was closest to:

- A. \$45.00
- B. \$44.07
- C. \$46.25
- D. \$45.30

79. The applied manufacturing overhead for the year was closest to:

- A. \$175,764
- B. \$174,600
- C. \$179,450
- D. \$170,992

80. The overhead for the year was:

- A. \$4,764 overapplied
- B. \$3,624 underapplied
- C. \$4,764 underapplied
- D. \$3,624 overapplied

Cahin Corporation applies manufacturing overhead on the basis of machine-hours. At the beginning of the most recent year, the company based its predetermined overhead rate on total estimated overhead of \$21,060. Actual manufacturing overhead for the year amounted to \$13,000 and actual machine-hours were 1,380. The company's predetermined overhead rate for the year was \$16.20 per machine-hour.

81. The predetermined overhead rate was based on how many estimated machine-hours?

- A. 1,380
- B. 802
- C. 225
- D. 1,300

82. The applied manufacturing overhead for the year was closest to:

- A. \$23,732
- B. \$21,060
- C. \$22,356
- D. \$13,800

83. The overhead for the year was:

- A. \$1,296 overapplied
- B. \$9,356 overapplied
- C. \$9,356 underapplied
- D. \$1,296 underapplied

Loraine Company applies manufacturing overhead to jobs using a predetermined overhead rate of 70% of direct labor cost. Any underapplied or overapplied overhead cost is closed to Cost of Goods Sold at the end of the month. During August, the following transactions were recorded by the company:

Raw materials (all direct materials):	
Purchased during the month.....	\$30,000
Used in production.....	\$31,000
Labor:	
Direct labor hours worked during the month.....	3,000
Direct labor cost incurred.....	\$27,000
Indirect labor cost incurred.....	\$6,000
Manufacturing overhead costs incurred (total).....	\$19,000
Inventories:	
Raw materials (all direct) August 31.....	\$8,000
Work in process, August 1.....	\$7,600
Work in process, August 31*.....	\$15,000

*contains \$6,000 of direct labor cost

84. The amount of direct materials cost in the August 31 Work in Process inventory account was:

- A. \$10,200
- B. \$9,000
- C. \$4,800
- D. \$4,200

85. The Cost of Goods Manufactured for August was:

- A. \$69,600
- B. \$69,500
- C. \$76,900
- D. \$84,500

86. The entry to dispose of the underapplied or overapplied overhead cost for the month would include:

- A. a credit of \$100 to Cost of Goods Sold.
- B. a credit of \$6,000 to Manufacturing Overhead.
- C. a debit of \$6,000 to Cost of Goods Sold.
- D. A credit of \$100 to the Manufacturing Overhead Account.

87. The balance on August 1 in the Raw Materials inventory account was:

- A. \$4,500
- B. \$7,000
- C. \$9,000
- D. \$11,500

On July 1, Woolard Corporation had \$20,000 of raw materials on hand. During the month, the company purchased an additional \$53,000 of raw materials. During July, \$49,000 of raw materials were requisitioned from the storeroom for use in production. These raw materials included both direct and indirect materials. The indirect materials totaled \$5,000.

Prepare journal entries to record these events. Use those journal entries to answer the following questions:

88. The debits to the Raw Materials account for the month of July total:

- A. \$53,000
- B. \$20,000
- C. \$73,000
- D. \$49,000

89. The credits to the Raw Materials account for the month of July total:

- A. \$53,000
- B. \$49,000
- C. \$20,000
- D. \$73,000

90. The debits to the Work in Process account as a consequence of the raw materials transactions in July total:

- A. \$53,000
- B. \$44,000
- C. \$0
- D. \$49,000

91. The credits to the Work in Process account as a consequence of the raw materials transactions in July total:

- A. \$49,000
- B. \$53,000
- C. \$0
- D. \$44,000

92. The debits to the Manufacturing Overhead account as a consequence of the raw materials transactions in July total:

- A. \$44,000
- B. \$5,000
- C. \$0
- D. \$49,000

93. The credits to the Manufacturing Overhead account as a consequence of the raw materials transactions in July total:

- A. \$0
- B. \$5,000
- C. \$49,000
- D. \$44,000

On April 1, Bachler Corporation had \$37,000 of raw materials on hand. During the month, the company purchased an additional \$75,000 of raw materials. During April, \$88,000 of raw materials were requisitioned from the storeroom for use in production. These raw materials included both direct and indirect materials. The indirect materials totaled \$6,000.

94. The journal entry to record the purchase of raw materials would include a:

- A. credit to Raw Materials of \$112,000
- B. credit to Raw Materials of \$75,000
- C. debit to Raw Materials of \$75,000
- D. debit to Raw Materials of \$112,000

95. The journal entry to record the requisition from the storeroom would include a:

- A. credit to Manufacturing Overhead of \$6,000
- B. debit to Raw Materials of \$88,000
- C. debit to Work in Process of \$82,000
- D. debit to Work in Process of \$88,000

During August, Sherill Corporation incurred \$78,000 of actual Manufacturing Overhead costs. During the same period, the Manufacturing Overhead applied to Work in Process was \$81,000.

96. The journal entry to record the incurrence of the actual Manufacturing Overhead costs would include a:

- A. debit to Manufacturing Overhead of \$78,000
- B. credit to Work in Process of \$81,000
- C. credit to Manufacturing Overhead of \$78,000
- D. debit to Work in Process of \$81,000

97. The journal entry to record the application of Manufacturing Overhead to Work in Process would include a:

- A. credit to Work in Process of \$78,000
- B. debit to Manufacturing Overhead of \$81,000
- C. credit to Manufacturing Overhead of \$81,000
- D. debit to Work in Process of \$78,000

The following partially completed T-accounts summarize last year's transactions for Kelshaw Company.

Raw Materials		Work in Process	
Beg Bal	4,000	(2)	20,000
(1)	18,000	Beg Bal	8,000
		(7)	50,000
		(2)	12,000
		(4)	15,000
		(6)	28,000
Manufacturing Overhead		Accounts Payable	
(2)	8,000	(6)	28,000
(3)	12,000	(1)	18,000
(4)	5,000	(5)	4,000
(5)	4,000		
Finished Goods		Wages & Salaries Payable	
Beg Bal	17,000	Beg Bal	6,000
(7)	50,000	(4)	30,000
End Bal	12,000		
Sales Salaries Expense		Accumulated Depreciation (Factory)	
(4)	10,000	Beg Bal	90,000
		(3)	12,000
Cost of Goods Sold			

At the end of the year, the company closes out the balance in the Manufacturing Overhead account to Cost of Goods Sold.

98. The indirect labor cost is:
- A. \$5,000
 - B. \$12,000
 - C. \$15,000
 - D. \$35,000

99. The cost of goods manufactured is:

- A. \$56,000
- B. \$50,000
- C. \$61,000
- D. \$55,000

100. The cost of goods sold (after adjustment for underapplied or overapplied overhead) is:

- A. \$55,000
- B. \$51,000
- C. \$54,000
- D. \$56,000

101. The manufacturing overhead applied is:

- A. \$28,000
- B. \$27,000
- C. \$29,000
- D. \$36,000

102. The cost of direct materials used is:

- A. \$20,000
- B. \$11,000
- C. \$12,000
- D. \$15,000

Dasilva Company had only one job in process on May 1. The job had been charged with \$1,400 of direct materials, \$6,192 of direct labor, and \$5,712 of manufacturing overhead cost. The company assigns overhead cost to jobs using the predetermined overhead rate of \$11.90 per direct labor-hour. During May, the following activity was recorded:

Raw materials (all direct materials):	
Beginning balance	\$8,500
Purchased during the month.....	\$48,000
Used in production.....	\$51,800
Labor:	
Direct labor-hours worked during the month.....	1,900
Direct labor cost incurred.....	\$24,510
Actual manufacturing overhead costs incurred.....	\$21,000
Inventories:	
Raw materials, May 30.....	?
Work in process, May 30.....	\$19,536

Work in process inventory on May 30 contains \$4,773 of direct labor cost. Raw materials consist solely of items that are classified as direct materials.

103. The balance in the raw materials inventory account on May 30 was:

- A. \$4,700
- B. \$43,300
- C. \$3,800
- D. \$39,500

104. The cost of goods manufactured for May was:

- A. \$98,920
- B. \$92,688
- C. \$120,800
- D. \$97,310

105. The entry to dispose of the underapplied or overapplied overhead cost for the month would include a:

- A. credit of \$1,610 to Manufacturing Overhead
- B. debit of \$4,403 to Manufacturing Overhead
- C. credit of \$4,403 to Manufacturing Overhead
- D. debit of \$1,610 to Manufacturing Overhead

Madtack Company's beginning and ending inventories for the month of November were as follows:

	November 1	November 30
Direct Materials	\$67,000	\$62,000
Work in Process	\$145,000	\$171,000
Finished Goods	\$85,000	\$78,000

Production data for month follow:

Direct labor cost incurred	\$200,000
Actual manufacturing overhead cost incurred	\$132,000
Direct materials purchases	\$165,000

Madtack applies manufacturing overhead cost to jobs at the rate of 70% of direct labor cost incurred. The company does not close underapplied or overapplied manufacturing overhead to Cost of Goods Sold until the end of the year.

106. Madtack Company's total manufacturing cost for November was:

- A. \$502,000
- B. \$510,000
- C. \$363,000
- D. \$495,000

107. Madtack Company's cost of goods manufactured for November was:

- A. \$469,000
- B. \$477,000
- C. \$495,000
- D. \$484,000

108. Madtack Company's Cost of Goods Sold for November was:

- A. \$484,000
- B. \$491,000
- C. \$502,000
- D. \$476,000

109. Madtack Company's manufacturing overhead for November was:

- A. overapplied by \$8,000
- B. underapplied by \$8,000
- C. overapplied by \$132,000
- D. underapplied by \$132,000

Maverick Company had the following transactions last year:

1. **Raw materials purchased on account totaled \$165,000.**
2. **Raw materials issued from storeroom, \$140,000 (90% direct materials, 10% indirect materials).**
3. **Factory utility costs incurred, \$35,000.**
4. **Employee salaries and wages incurred, \$200,000 (80% direct labor, 10% indirect labor and 10% selling, general, and administrative).**
5. **Depreciation on factory equipment, \$30,000.**
6. **Depreciation on autos used by the sales staff, \$15,000.**
7. **Overhead was applied to production at a rate of 50% of direct labor cost.**
8. **Goods costing \$310,000 were transferred from Work in Process to Finished Goods.**

110. The total cost added to Work in Process during the year was:

- A. \$366,000
- B. \$340,000
- C. \$420,000
- D. \$286,000

111. The cost of goods manufactured was:

- A. \$366,000
- B. \$420,000
- C. \$385,000
- D. \$310,000

The Lee Company uses a job-order costing system. The following data were recorded for June:

Job Number	June 1 Work in Process Inventory	Added During June	
		Direct Materials	Direct Labor
235	\$2,500	\$600	\$400
236	\$1,500	\$800	\$1,000
237	\$1,000	\$1,200	\$1,750
238	\$800	\$1,500	\$2,250

Overhead is charged to production at 80% of direct materials cost. Jobs 235, 237, and 238 were completed during June and transferred to finished goods. Jobs 235 and 238 have been delivered to customers.

112. Lee Company's cost of goods sold for June was:

- A. \$15,520
- B. \$10,170
- C. \$9,730
- D. \$14,640

113. Lee's Work in Process inventory balance on June 30 was:

- A. \$4,100
- B. \$3,940
- C. \$3,300
- D. \$9,450

Rappaport Corporation reported the following data for the month of February:

Inventories:	Beginning	Ending
Raw materials	\$38,000	\$22,000
Work in process	\$24,000	\$15,000
Finished goods	\$29,000	\$30,000

Additional information:

Raw materials purchases	\$79,000
Direct labor cost.....	\$93,000
Manufacturing overhead cost incurred.....	\$51,000
Indirect materials included in manufacturing overhead cost incurred.....	\$7,000
Manufacturing overhead cost applied to Work in Process	\$48,000

114. The direct materials cost for February is:

- A. \$95,000
- B. \$88,000
- C. \$79,000
- D. \$63,000

115. The cost of goods manufactured for February is:

- A. \$220,000
- B. \$238,000
- C. \$241,000
- D. \$223,000

116. The adjusted cost of goods sold that appears on the income statement for February is:

- A. \$240,000
- B. \$238,000
- C. \$239,000
- D. \$237,000

Smalling Inc. has provided the following data for the month of November:

Inventories:	Beginning	Ending
Work in process	\$19,000	\$11,000
Finished goods	\$46,000	\$58,000

Additional information:

Direct materials.....	\$75,000
Direct labor cost.....	\$97,000
Manufacturing overhead cost incurred.....	\$46,000
Manufacturing overhead cost applied to Work in Process	\$45,000

117. The cost of goods manufactured for November is:

- A. \$226,000
- B. \$218,000
- C. \$225,000
- D. \$217,000

118. The adjusted cost of goods sold that appears on the income statement for November is:

- A. \$237,000
- B. \$225,000
- C. \$214,000
- D. \$213,000

The Garnet Company uses a job-order costing system. The following data were recorded for February:

Job Number	February 1 Work in Process Inventory	Added during February	
		Direct Materials	Direct Labor
1	\$1,500	\$400	\$300
2	\$2,000	\$600	\$750
3	\$500	\$1,000	\$1,500
4	\$250	\$1,300	\$2,400

Overhead is charged to jobs at the rate of 140% of direct labor cost.

Jobs 1, 2, and 3 were completed during February and transferred to finished goods. Job 3 has been delivered to the customer.

119. The manufacturing costs added to jobs during the month totaled:

- A. \$8,250
- B. \$11,880
- C. \$12,500
- D. \$15,180

120. The work in process inventory on February 28 was:

- A. \$7,310
- B. \$9,500
- C. \$3,950
- D. \$7,060

121. The cost of goods sold during February was:

- A. \$5,100
- B. \$3,000
- C. \$12,120
- D. \$8,120

Eccles Corporation uses a job-order costing system and applies overhead to jobs using a predetermined overhead rate. During the year the company's Finished Goods inventory account was debited for \$384,000 and credited for \$325,900. The ending balance in the Finished Goods inventory account was \$72,100. At the end of the year, manufacturing overhead was underapplied by \$5,400.

122. The balance in the Finished Goods inventory account at the beginning of the year was:

- A. \$72,100
- B. \$5,400
- C. \$14,000
- D. \$58,100

123. If the applied manufacturing overhead was \$174,000, the actual manufacturing overhead cost for the year was:

- A. \$193,400
- B. \$251,500
- C. \$179,400
- D. \$168,600

The following partially completed T-accounts summarize transactions for Faas Company during the year:

Raw Materials		Finished Goods	
Beg Bal	8,200	Beg Bal	5,100
	500		22,900
	6,600		22,700
Work in Process		Manufacturing Overhead	
Beg Bal	3,600		1,600
	5,000		4,100
	8,000		3,300
	9,100		
Wages & Salaries Payable		Cost of Goods Sold	
	17,200	Beg Bal	2,900
	2,900		22,900
	12,100		

124. The Cost of Goods Manufactured was:

- A. \$22,900
- B. \$22,700
- C. \$8,200
- D. \$45,600

125. The direct labor cost was:

- A. \$8,000
- B. \$12,100
- C. \$17,200
- D. \$11,600

126. The direct materials cost was:

- A. \$3,600
- B. \$6,600
- C. \$5,000
- D. \$8,000

127. The manufacturing overhead applied was:

- A. \$4,100
- B. \$3,300
- C. \$15,400
- D. \$9,100

128. The manufacturing overhead was:

- A. \$3,300 overapplied
- B. \$3,300 underapplied
- C. \$100 overapplied
- D. \$100 underapplied

Essay Questions

129. A number of companies in different industries are listed below:

Natural gas production company

Food caterer that supplies food for weddings and other special events

Elevator production and installation company

Coal mining company

Contract printer that produces posters, books, and pamphlets to order

Dairy farm

Required: For each company, indicate whether the company is most likely to use job-order costing or process costing.

130. Whether a company uses process costing or job-order costing depends on its industry. A number of companies in different industries are listed below:

Brick manufacturer

Contract printer that produces posters, books, and pamphlets to order

Natural gas production company

Dairy farm

Coal mining company

Specialty coffee roaster (roasts small batches of specialty coffee beans)

Required: For each company, indicate whether the company is most likely to use job-order costing or process costing.

131. Some companies use process costing and some use job-order costing. Which method a company uses depends on its industry. A number of companies in different industries are listed below:

Custom boat builder

Frozen cranberry juice processor

Concrete block manufacturer

Winery that produces a number of varietal wines

Aluminum refiner that makes aluminum ingots from bauxite ore

Required: For each company, indicate whether the company is most likely to use job-order costing or process costing.

132. Granite Company uses a job-order costing system. The company applies manufacturing overhead to jobs using a predetermined overhead rate based on direct labor-hours. Last year, manufacturing overhead and direct labor-hours were estimated at \$80,000 and 16,000 hours respectively, for the year. In June, Job #315 was completed. Materials costs on the job totaled \$1,500 and labor costs totaled \$2,400 at \$6 per hour. At the end of the year, it was determined that the company worked 15,000 direct labor-hours for the year, and incurred \$78,000 in actual manufacturing overhead costs.

Required: a. Determine the predetermined overhead rate for the year.

b. Determine the amount of overhead charged to jobs during the year.

c. Determine the amount of underapplied or overapplied overhead for the year.

d. Assuming that 100 units were completed, determine the unit cost that would appear on the job cost sheet for Job #315.

133. Job 827 was recently completed. The following data have been recorded on its job cost sheet:

Direct materials	\$61,050	
Direct labor-hours	1,332	labor-hours
Direct labor wage rate	\$14	per labor-hour
Machine-hours	1,480	machine-hours
Number of units completed	3,700	units

The company applies manufacturing overhead on the basis of machine-hours. The predetermined overhead rate is \$13 per machine-hour.

Required: Compute the unit product cost that would appear on the job cost sheet for this job.

134. Job 484 was recently completed. The following data have been recorded on its job cost sheet:

Direct materials	\$57,240	
Direct labor-hours	1,692	DLHs
Direct labor wage rate	\$12	per DLH
Number of units completed	3,600	units

The company applies manufacturing overhead on the basis of direct labor-hours. The predetermined overhead rate is \$24 per direct labor-hour.

Required: Compute the unit product cost that would appear on the job cost sheet for this job.

135. Alake Company is a manufacturing firm that uses job-order costing. At the beginning of the year, the company's inventory balances were as follows:

Raw materials	\$19,000
Work in process	\$82,000
Finished goods	\$32,000

The company applies overhead to jobs using a predetermined overhead rate based on machine-hours. At the beginning of the year, the company estimated that it would work 36,000 machine-hours and incur \$216,000 in manufacturing overhead cost. The following transactions were recorded for the year:

- a. Raw materials were purchased, \$443,000.
 - b. Raw materials were requisitioned for use in production, \$450,000 (\$435,000 direct and \$15,000 indirect).
 - c. The following employee costs were incurred: direct labor, \$229,000; indirect labor, \$54,000; and administrative salaries, \$117,000.
 - d. Selling costs, \$119,000.
 - e. Factory utility costs, \$21,000.
 - f. Depreciation for the year was \$121,000 of which \$114,000 is related to factory operations and \$7,000 is related to selling, general, and administrative activities.
 - g. Manufacturing overhead was applied to jobs. The actual level of activity for the year was 38,000 machine-hours.
 - h. The cost of goods manufactured for the year was \$910,000.
 - i. Sales for the year totaled \$1,173,000 and the costs on the job cost sheets of the goods that were sold totaled \$895,000.
 - j. The balance in the Manufacturing Overhead account was closed out to Cost of Goods Sold.
- Required: Prepare the appropriate journal entry for each of the items above (a. through j.). You can assume that all transactions with employees, customers, and suppliers were conducted in cash.

136. Babbel Company is a manufacturing firm that uses job-order costing. The company's inventory balances were as follows at the beginning and end of the year:

	Beginning Balance	Ending Balance
Raw materials	\$21,000	\$24,000
Work in process	\$40,000	\$22,000
Finished goods	\$26,000	\$41,000

The company applies overhead to jobs using a predetermined overhead rate based on machine-hours. At the beginning of the year, the company estimated that it would work 38,000 machine-hours and incur \$266,000 in manufacturing overhead cost. The following transactions were recorded for the year:

- Raw materials were purchased, \$300,000.
- Raw materials were requisitioned for use in production, \$297,000 (\$281,000 direct and \$16,000 indirect).
- The following employee costs were incurred: direct labor, \$389,000; indirect labor, \$62,000; and administrative salaries, \$176,000.
- Selling costs, \$160,000.
- Factory utility costs, \$19,000.
- Depreciation for the year was \$143,000 of which \$137,000 is related to factory operations and \$6,000 is related to selling, general, and administrative activities.
- Manufacturing overhead was applied to jobs. The actual level of activity for the year was 34,000 machine-hours.
- Sales for the year totaled \$1,283,000.

Required: a. Prepare a schedule of cost of goods manufactured in good form.

b. Was the overhead underapplied or overapplied? By how much?

c. Prepare an income statement for the year in good form. The company closes any underapplied or overapplied overhead to Cost of Goods Sold.

137. The Allen Company uses a job-order costing system. The following activity took place during the month of March:

- a. Raw materials purchased, \$35,000.
- b. Raw materials (all direct) requisitioned for use in production, \$34,500.
- c. Salaries and wages cost incurred:
 - Direct labor cost, \$39,000
 - Indirect labor cost, \$13,000
 - Sales salaries, \$20,000
- d. Depreciation on factory equipment, \$12,000.
- e. Factory utility costs incurred, \$7,500.
- f. Manufacturing overhead was applied at a rate of 200% of direct materials used.
- g. Advertising expense incurred, \$40,000.
- h. Cost of Goods Manufactured, \$160,000.
- i. Cost of Goods Sold, \$158,000.

Required: Prepare journal entries to record the information above. Key your entries by the letters a through i. Assume all purchases are made on account.

138. During December, Ketchum Corporation purchased \$64,000 of raw materials on credit to add to its raw materials inventory. A total of \$80,000 of raw materials was requisitioned from the storeroom for use in production. These requisitioned raw materials included \$7,000 of indirect materials.

Required: Prepare journal entries to record the purchase of materials and their use in production.

139. During May, Sarkin Corporation incurred \$69,000 of actual Manufacturing Overhead costs. During the same period, the Manufacturing Overhead applied to Work in Process was \$73,000.

Required: Prepare journal entries to record the incurrence of manufacturing overhead and the application of manufacturing overhead to Work in Process.

140. The following cost data relate to the manufacturing activities of the Kamas Company during the most recent year:

Manufacturing overhead costs incurred during the year:	
Property taxes	\$1,600
Utilities, factory	2,600
Indirect labor	5,100
Depreciation, factory	13,000
Insurance, factory	2,500
Total actual manufacturing overhead cost.....	<u>\$24,800</u>
 Other costs incurred during the year:	
Purchases of raw materials.....	\$15,000
Direct labor cost.....	\$22,000
 Inventories:	
Raw materials, beginning.....	\$5,000
Raw materials, ending.....	\$4,400
Work in process, beginning.....	\$3,500
Work in process, ending.....	\$4,500

The company uses a predetermined overhead rate to charge overhead cost to production. The rate for the year just completed was \$4.00 per machine-hour; a total of 6,000 machine-hours were recorded for the year.

Required: a. Compute the amount of underapplied or overapplied overhead cost for the year just ended.

b. Prepare a schedule of cost of goods manufactured for the year.

141. Weisinger Corporation has provided the following data for the month of January:

Inventories:	Beginning	Ending
Raw materials	\$28,000	\$29,000
Work in process	\$16,000	\$14,000
Finished goods	\$42,000	\$54,000

Additional information:

Raw materials purchases	\$56,000
Direct labor cost.....	\$87,000
Manufacturing overhead cost incurred.....	\$51,000
Indirect materials included in manufacturing overhead cost incurred.....	\$3,000
Manufacturing overhead cost applied to Work in Process ...	\$55,000

Required: Prepare a Schedule of Cost of Goods Manufactured and a Schedule of Cost of Goods Sold in good form.

142. Ramil Corporation has provided the following data for the most recent month:

Raw materials, beginning balance	\$14,000
Work in process, beginning balance	\$31,000
Finished Goods, beginning balance	\$41,000
Transactions:	
(1) Raw materials purchases	\$88,000
(2) Raw materials used in production (all direct materials).....	\$91,000
(3) Direct labor.....	\$86,000
(4) Manufacturing overhead costs incurred	\$76,000
(5) Manufacturing overhead applied	\$87,000
(6) Cost of units completed and transferred from Work in Process to Finished Goods	\$286,000
(7) Any overapplied or underapplied manufacturing overhead is closed to Cost of Goods Sold	?
(8) Finished goods are sold.....	\$319,000

Required: Prepare T-accounts for Raw Materials, Work in Process, Finished Goods, Manufacturing Overhead, and Cost of Goods Sold. Record the beginning balances and each of the transactions listed above. Finally, determine the ending balances.

143. During November, Jiminez Corporation recorded the following:

Raw materials, beginning balance	\$14,000
Work in process, beginning balance	\$39,000
Finished Goods, beginning balance	\$50,000
Transactions:	
(1) Raw materials purchases	\$66,000
(2) Raw materials used in production (all direct materials).....	\$64,000
(3) Direct labor.....	\$70,000
(4) Manufacturing overhead costs incurred	\$68,000
(5) Manufacturing overhead applied	\$81,000
(6) Cost of units completed and transferred from Work in Process to Finished Goods	\$231,000
(7) Any overapplied or underapplied manufacturing overhead is closed to Cost of Goods Sold	?
(8) Finished goods are sold.....	\$251,000

Required: Prepare T-accounts for Raw Materials, Work in Process, Finished Goods, and Manufacturing Overhead, and Cost of Goods Sold. Record the beginning balances and each of the transactions listed above. Finally, determine the ending balances.

144. Hirpara Inc. has provided the following data for July:

Raw materials, beginning balance	\$12,000
Work in process, beginning balance	\$32,000
Finished Goods, beginning balance	\$41,000
Transactions:	
(1) Raw materials purchases	\$64,000
(2) Raw materials used in production (all direct materials).....	\$69,000
(3) Direct labor.....	\$83,000
(4) Manufacturing overhead costs incurred	\$62,000
(5) Manufacturing overhead applied	\$63,000
(6) Cost of units completed and transferred from Work in Process to Finished Goods	\$208,000
(7) Any overapplied or underapplied manufacturing overhead is closed to Cost of Goods Sold	?
(8) Finished goods are sold.....	\$234,000

Required: Prepare T-accounts for Raw Materials, Work in Process, Finished Goods, and Manufacturing Overhead, and Cost of Goods Sold. Record the beginning balances and each of the transactions listed above. Finally, determine the ending balances.

Chapter 02 Systems Design: Job-Order Costing **Answer Key**

True / False Questions

1. Job-order costing would be more likely to be used than process costing in situations where many different products or services are produced each period to customer specifications.

TRUE

AACSB: Reflective Thinking

AICPA BB: Industry

AICPA FN: Measurement

Bloom's: Knowledge

Learning Objective: 1

Level: Easy

2. In a job-order costing system, costs are traced to departments and then allocated to units of product using an average process.

FALSE

AACSB: Reflective Thinking

AICPA BB: Critical Thinking

AICPA FN: Measurement

Bloom's: Knowledge

Learning Objective: 1

Level: Easy

3. Job-order costing is used in those situations where units of a product are homogeneous, such as in the manufacture of sugar.

FALSE

AACSB: Reflective Thinking
AICPA BB: Industry
AICPA FN: Measurement
Bloom's: Knowledge
Learning Objective: 1
Level: Easy

4. Job-order costing is usually not used in service organizations such as hospitals and law firms.

FALSE

AACSB: Reflective Thinking
AICPA BB: Industry
AICPA FN: Measurement
Bloom's: Knowledge
Learning Objective: 1
Level: Easy

5. The three cost categories appearing on a job cost sheet are: selling expense, manufacturing expense, and administrative expense.

FALSE

AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Knowledge
Learning Objective: 2
Level: Easy

6. The labor time ticket contains the details of how much time an employee takes on each task throughout the day.

TRUE

*AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Knowledge
Learning Objective: 2
Level: Easy*

7. In order to improve the accuracy of unit costs, most companies recompute the predetermined overhead rate each month.

FALSE

*AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Comprehension
Learning Objective: 3
Level: Medium*

8. Use of a single, plantwide overhead rate is generally appropriate only for very large manufacturing companies.

FALSE

*AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Comprehension
Learning Objective: 3
Level: Medium*

9. Predetermined overhead rates are based on actual cost and activity data.

FALSE

*AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Knowledge
Learning Objective: 3
Level: Easy*

10. The following journal entry would be made to apply overhead cost to jobs in a job-order costing system:

Work in Process	XXX
 Manufacturing Overhead	XXX

TRUE

*AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Comprehension
Learning Objective: 4
Learning Objective: 5
Level: Medium*

11. When completed goods are sold, the transaction is recorded as a debit to Cost of Goods Sold and a credit to Work in Process.

FALSE

*AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Comprehension
Learning Objective: 4
Level: Medium*

12. When the predetermined overhead rate is based on direct labor-hours, the amount of overhead applied to a job is proportional to the amount of actual direct labor-hours incurred on the job.

TRUE

AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Comprehension
Learning Objective: 5
Level: Easy

13. Actual manufacturing overhead costs are traced to specific jobs.

FALSE

AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Comprehension
Learning Objective: 5
Level: Medium

14. A credit balance in the Manufacturing Overhead account at the end of the year means that overhead was underapplied.

FALSE

AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Comprehension
Learning Objective: 7
Learning Objective: 8
Level: Medium

15. The sum of all amounts transferred from the Work in Process account and into the Finished Goods account represents the Cost of Goods Manufactured for the period.

TRUE

*AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Comprehension
Learning Objective: 7
Level: Medium*

16. The most common accounting treatment of underapplied manufacturing overhead is to transfer it to the Manufacturing Overhead control account.

FALSE

*AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Comprehension
Learning Objective: 8
Level: Hard*

Multiple Choice Questions

17. Which of the following companies would be most likely to use a job-order costing system rather than a process costing system?

- A. fast food restaurant
- B. shipbuilding**
- C. crude oil refining
- D. candy making

*AACSB: Reflective Thinking
AICPA BB: Industry
AICPA FN: Measurement
Bloom's: Knowledge
Learning Objective: 1
Level: Easy*

18. Computing unit product costs involves averaging in:

	Job-order costing	Process costing
A)	Yes	No
B)	Yes	Yes
C)	No	Yes
D)	No	No

A. A

B. B

C. C

D. D

AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Comprehension
Learning Objective: 1
Level: Medium

19. For which situation(s) below would an organization be more likely to use a job-order costing system of accumulating product costs rather than a process costing system?

A. a steel factory that processes iron ore into steel bars

B. a factory that processes sugar and other ingredients into black licorice

C. a costume maker that makes specialty costumes for figure skaters

D. all of the above

AACSB: Reflective Thinking
AICPA BB: Industry
AICPA FN: Measurement
Bloom's: Knowledge
Learning Objective: 1
Level: Easy

20. In job-order costing, all of the following statements are correct with respect to labor time and cost except:

- A. time tickets are kept by employees showing the amount of work on specific jobs.
- B. the job cost sheet for a job will contain all direct labor charges to that particular job.
- C. labor cost that can be traced to a job only with a great deal of effort is treated as part of manufacturing overhead.

D. a machine operator performing routine annual maintenance work on a piece of equipment would charge the maintenance time to a specific job.

AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Comprehension
Learning Objective: 2
Level: Medium

21. Which of the following documents is used to specify the type and quantity of materials drawn from the storeroom, and identifies the job to which the costs of the materials are to be charged?

- A. Job Cost Sheet
- B. Bill of Materials
- C.** Material Requisition Form
- D. Purchase Order

AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Knowledge
Learning Objective: 2
Level: Medium

22. Choice of allocation base should be made based on:

- A. the relative size of the base.
- B. the base's relation to direct labor.
- C. the base's activity.
- D.** whether the base actually drives the cost being allocated.

AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Knowledge
Learning Objective: 3
Level: Easy

23. In a job-order costing system, the journal entry to record the application of overhead cost to jobs would include:

- A.** a credit to the Manufacturing Overhead account.
- B. a credit to the Work in Process inventory account.
- C. a debit to Cost of Goods Sold.
- D. a debit to the Manufacturing Overhead account.

AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Comprehension
Learning Objective: 4
Learning Objective: 5
Level: Medium

24. Ivory Company uses a job-order costing system. What year-end journal entry could Ivory make to dispose of (close out) \$4,150 of overapplied manufacturing overhead cost?

A) Finished Goods	\$4,150	
Manufacturing Overhead		\$4,150
B) Cost of Goods Sold	\$4,150	
Manufacturing Overhead		\$4,150
C) Manufacturing Overhead	\$4,150	
Finished Goods		\$4,150
D) Manufacturing Overhead	\$4,150	
Cost of Goods Sold		\$4,150

- A. A
- B. B
- C. C
- D.** D

AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Comprehension
Learning Objective: 4
Learning Objective: 8
Level: Medium

25. In a job-order costing system, the use of indirect materials would usually be recorded as a debit to:

- A. Raw Materials.
- B. Work in Process.
- C. Manufacturing Overhead.**
- D. Finished Goods.

AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Comprehension
Learning Objective: 4
Level: Medium

26. In a job-order costing system, direct labor costs usually are recorded initially with a debit to:

- A. Manufacturing Overhead.
- B. Finished Goods inventory.
- C. Direct Labor Expense.
- D. Work in Process.**

AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Knowledge
Learning Objective: 4
Level: Easy

27. In a job-order costing system, the entry to record depreciation on manufacturing equipment would include:

- A. a debit to the Work in Process inventory account.
- B. a debit to the Depreciation Expense account.
- C. a debit to the Manufacturing Overhead account.**
- D. a credit to the Work in Process inventory account.

AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Comprehension
Learning Objective: 4
Level: Medium

28. Which of the following accounts is debited when indirect labor is recorded?

- A. Work in Process
- B. Salaries and Wages Expense
- C. Salaries and Wages Payable
- D.** Manufacturing Overhead

AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Comprehension
Learning Objective: 4
Level: Medium

29. When applying manufacturing overhead to jobs, the formula to calculate the amount is as follows:

- A. Predetermined overhead rate divided by the actual manufacturing overhead incurred on the particular job.
- B. Predetermined overhead rate times the actual manufacturing overhead incurred on the particular job.
- C. Predetermined overhead rate divided by the actual units of allocation base charged to the particular job.
- D.** Predetermined overhead rate times the actual units of allocation base charged to the particular job.

AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Comprehension
Learning Objective: 5
Level: Easy

30. In a job-order costing system, the amount of overhead cost that has been applied to a job that remains incomplete at the end of a period:

- A. is deducted on the Income Statement as overapplied overhead.
- B. is closed to Cost of Goods Sold.
- C. is transferred to Finished Goods at the end of the period.
- D.** is part of the ending balance of the Work in Process inventory account.

AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Comprehension
Learning Objective: 7
Level: Medium

31. If a company applies overhead to jobs on the basis of a predetermined overhead rate, a credit balance in the Manufacturing Overhead account at the end of any period means that:

- A.** more overhead cost has been charged to jobs than has been incurred during the period.
- B. more overhead cost has been incurred during the period than has been charged to jobs.
- C. the amount of overhead cost charged to jobs is greater than the estimated cost for the period.
- D. the amount of overhead cost charged to jobs is less than the estimated overhead cost for the period.

AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Comprehension
Learning Objective: 8
Level: Medium

32. Which of the following situations always results in underapplied overhead?

- A.** actual overhead is greater than applied overhead
- B. actual overhead is less than applied overhead
- C. estimated overhead is greater than actual overhead
- D. estimated overhead is less than actual overhead

AACSB: Reflective Thinking
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Comprehension
Learning Objective: 8
Level: Medium

33. When closing overapplied manufacturing overhead to cost of goods sold, which of the following would be true?

- A. Work in process will decrease.
- B. Cost of goods sold will increase.
- C. Net income will decrease.
- D.** Gross margin will increase.

AACSB: Reflective Thinking

AICPA BB: Critical Thinking

AICPA FN: Measurement

Bloom's: Comprehension

Learning Objective: 8

Level: Medium

34. The Work in Process inventory account of a manufacturing company shows a balance of \$2,400 at the end of an accounting period. The job cost sheets of the two uncompleted jobs show charges of \$400 and \$200 for direct materials, and charges of \$300 and \$500 for direct labor. From this information, it appears that the company is using a predetermined overhead rate, as a percentage of direct labor costs, of:

- A. 80%
- B. 125%**
- C. 300%
- D. 240%

Work in Process Inventory	
Direct Materials	\$400
Direct Materials	\$200
Direct Labor	\$300
Direct Labor	\$500
	?
End. Bal.	\$2,400

$$\text{Manufacturing overhead} = \$2,400 - (\$400 + \$200 + \$300 + \$500)$$

$$\text{Manufacturing overhead} = \$1,000$$

$$\text{Total direct labor} = \$300 + \$500 = \$800$$

$$\text{Manufacturing overhead} = \text{Predetermined overhead rate} \times \text{Direct labor}$$

$$\text{Predetermined overhead rate} = \text{Manufacturing overhead} \div \text{Direct labor}$$

$$\text{Predetermined overhead rate} = \$1,000 \div \$800$$

$$\text{Predetermined overhead rate} = 125\%$$

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Analysis
 Learning Objective: 2
 Learning Objective: 3
 Learning Objective: 5
 Level: Hard

35. Job 607 was recently completed. The following data have been recorded on its job cost sheet:

Direct materials	\$3,405	
Direct labor-hours	54	labor-hours
Direct labor wage rate	\$13	per labor-hour
Machine-hours	158	machine-hours

The company applies manufacturing overhead on the basis of machine-hours. The predetermined overhead rate is \$14 per machine-hour. The total cost that would be recorded on the job cost sheet for Job 607 would be:

- A. \$4,107
- B. \$6,319**
- C. \$3,432
- D. \$4,863

Applied manufacturing overhead = Predetermined overhead rate × Actual machine-hours

Applied manufacturing overhead = \$14 × 158

Applied manufacturing overhead = \$2,212

Total cost = Direct materials + Direct labor + Applied manufacturing overhead

Total cost of Job 607 = \$3,405 + (54 × \$13) + \$2,212 = \$6,319

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 2
Learning Objective: 5
Level: Easy

36. The following data have been recorded for recently completed Job 501 on its job cost sheet. Direct materials cost was \$3,067. A total of 30 direct labor-hours and 104 machine-hours were worked on the job. The direct labor wage rate is \$12 per labor-hour. The company applies manufacturing overhead on the basis of machine-hours. The predetermined overhead rate is \$11 per machine-hour. The total cost for the job on its job cost sheet would be:

- A. \$4,571
- B. \$3,757
- C. \$3,090
- D. \$3,427

Applied manufacturing overhead = Predetermined overhead rate \times Actual machine-hours

Applied manufacturing overhead = $\$11 \times 104$

Applied manufacturing overhead = \$1,144

Total cost = Direct materials + Direct labor + Applied manufacturing overhead

Total cost of Job 607 = $\$3,067 + (30 \times \$12) + \$1,144 = \$4,571$

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 2
Learning Objective: 5
Level: Easy

37. Freeman Company uses a predetermined overhead rate based on direct labor-hours to apply manufacturing overhead to jobs. At the beginning of the year, the company estimated manufacturing overhead would be \$150,000 and direct labor-hours would be 10,000. The actual figures for the year were \$186,000 for manufacturing overhead and 12,000 direct labor-hours. The cost records for the year will show:

- A. overapplied overhead of \$30,000
- B. underapplied overhead of \$30,000
- C. underapplied overhead of \$6,000**
- D. overapplied overhead of \$6,000

Predetermined overhead rate = $\$150,000 \div 10,000 = \15 per direct labor-hour

Applied manufacturing overhead
= Predetermined overhead rate \times Actual direct labor-hours
= $\$15 \times 12,000$
= \$180,000

Actual manufacturing overhead - Applied manufacturing overhead = Underapplied
(overapplied) manufacturing overhead
 $\$186,000 - \$180,000 = \$6,000$ underapplied

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 3
Learning Objective: 5
Learning Objective: 8
Level: Medium

38. Harrell Company uses a predetermined overhead rate based on direct labor-hours to apply manufacturing overhead to jobs. At the beginning of the year the company estimated its total manufacturing overhead cost at \$400,000 and its direct labor-hours at 100,000 hours. The actual overhead cost incurred during the year was \$350,000 and the actual direct labor-hours incurred on jobs during the year was 90,000 hours. The manufacturing overhead for the year would be:

- A. \$10,000 underapplied
- B. \$10,000 overapplied**
- C. \$50,000 underapplied
- D. \$50,000 overapplied

Predetermined overhead rate = $\$400,000 \div 100,000 = \4 per direct labor-hour

Applied manufacturing overhead = Predetermined overhead rate \times Actual direct labor-hours
= $\$4 \times 90,000$
= \$360,000

Actual manufacturing overhead - Applied manufacturing overhead = Underapplied
(overapplied) manufacturing overhead
 $\$350,000 - \$360,000 = \$10,000$ overapplied

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 3
Learning Objective: 5
Learning Objective: 8
Level: Medium

39. For the current year, Paxman Company incurred \$150,000 in actual manufacturing overhead cost. The Manufacturing Overhead account showed that overhead was overapplied in the amount of \$6,000 for the year. If the predetermined overhead rate was \$8.00 per direct labor-hour, how many hours were worked during the year?

- A. 19,500 hours
- B. 18,000 hours
- C. 18,750 hours
- D. 17,750 hours

Applied manufacturing overhead - Actual manufacturing overhead = Overapplied manufacturing overhead

Applied manufacturing overhead - \$150,000 = \$6,000

Applied manufacturing overhead = \$156,000

Applied manufacturing overhead = Predetermined overhead rate \times Actual direct labor-hours

\$156,000 = \$8 \times Actual direct labor-hours

Actual direct labor-hours = \$156,000 \div \$8 = 19,500 hours

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 3
Learning Objective: 5
Learning Objective: 8
Level: Hard

40. At the beginning of the year, manufacturing overhead for the year was estimated to be \$702,450. At the end of the year, actual direct labor-hours for the year were 33,100 hours, the actual manufacturing overhead for the year was \$697,450, and manufacturing overhead for the year was overapplied by \$40,680. If the predetermined overhead rate is based on direct labor-hours, then the estimated direct labor-hours at the beginning of the year used in the predetermined overhead rate must have been:

- A. 31,500 direct labor-hours
- B. 29,452 direct labor-hours
- C. 31,276 direct labor-hours
- D. 33,100 direct labor-hours

Applied manufacturing overhead - Actual manufacturing overhead = Overapplied manufacturing overhead

Applied manufacturing overhead - \$697,450 = \$40,680

Applied manufacturing overhead = \$738,130

Applied manufacturing overhead = Predetermined overhead rate \times Actual direct labor-hours

\$738,130 = Predetermined overhead rate \times 33,100

Predetermined overhead rate = \$22.30 per direct labor-hour

Predetermined overhead rate = Estimated manufacturing overhead \div Estimated direct labor-hours

\$22.30 = \$702,450 \div Estimated direct labor-hours

Estimated direct labor-hours = 31,500 direct labor-hours

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Analysis
Learning Objective: 3
Learning Objective: 5
Learning Objective: 8
Level: Hard

41. Brabo Corporation uses direct labor-hours in its predetermined overhead rate. At the beginning of the year, the estimated direct labor-hours were 15,700 hours. At the end of the year, actual direct labor-hours for the year were 16,700 hours, the actual manufacturing overhead for the year was \$352,960, and manufacturing overhead for the year was overapplied by \$27,800. The estimated manufacturing overhead at the beginning of the year used in the predetermined overhead rate must have been:

- A. \$327,124
- B. \$357,960**
- C. \$380,760
- D. \$347,960

Applied manufacturing overhead - Actual manufacturing overhead = Overapplied manufacturing overhead

Applied manufacturing overhead - \$352,960 = \$27,800

Applied manufacturing overhead = \$380,760

Applied manufacturing overhead = Predetermined overhead rate \times 16,700

\$380,760 = Predetermined overhead rate \times 16,700

Predetermined overhead rate = \$22.80 per direct labor-hour

Predetermined overhead rate = Estimated manufacturing overhead \div Estimated direct labor-hours

\$22.80 = Estimated manufacturing overhead \div 15,700

Estimated manufacturing overhead = \$357,960

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Analysis
Learning Objective: 3
Learning Objective: 5
Learning Objective: 8
Level: Hard

42. Crimp Corporation uses direct labor-hours in its predetermined overhead rate. At the beginning of the year, the estimated direct labor-hours were 15,000 hours and the total estimated manufacturing overhead was \$258,000. At the end of the year, actual direct labor-hours for the year were 13,100 hours and the actual manufacturing overhead for the year was \$253,000. Overhead at the end of the year was:

- A. \$27,680 overapplied
- B. \$32,680 overapplied
- C. \$27,680 underapplied**
- D. \$32,680 underapplied

Predetermined overhead rate = Estimated manufacturing overhead ÷ Estimated direct labor-hours

Predetermined overhead rate = \$258,000 ÷ 15,000

Predetermined overhead rate = \$17.20 per direct labor-hour

Applied manufacturing overhead = Predetermined overhead rate × Actual direct labor-hours

Applied manufacturing overhead = \$17.20 × 13,100

Applied manufacturing overhead = \$225,320

Actual manufacturing overhead - Applied manufacturing overhead = Underapplied manufacturing overhead

\$253,000 - \$225,320 = \$27,680 underapplied

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 3
Learning Objective: 5
Learning Objective: 8
Level: Medium

43. Dagnon Corporation uses direct labor-hours in its predetermined overhead rate. At the beginning of the year, the total estimated manufacturing overhead was \$299,130. At the end of the year, actual direct labor-hours for the year were 17,400 hours, manufacturing overhead for the year was overapplied by \$13,850, and the actual manufacturing overhead was \$294,130. The predetermined overhead rate for the year must have been closest to:

- A. \$17.70
- B. \$17.19
- C. \$18.22
- D. \$16.90

Applied manufacturing overhead - Actual manufacturing overhead = Overapplied manufacturing overhead

Applied manufacturing overhead - \$294,130 = \$13,850

Applied manufacturing overhead = \$307,980

Applied manufacturing overhead = Predetermined overhead rate × Actual direct labor-hours

\$307,980 = Predetermined overhead rate × 17,400

Predetermined overhead rate = \$17.70 per direct labor-hours

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 3
Learning Objective: 5
Learning Objective: 8
Level: Hard

44. The Watts Company uses predetermined overhead rates to apply manufacturing overhead to jobs. The predetermined overhead rate is based on labor cost in Dept. A and on machine-hours in Dept. B. At the beginning of the year, the company made the following estimates:

	Dept A	Dept B
Direct labor cost	\$30,000	\$40,000
Manufacturing overhead	\$60,000	\$50,000
Direct labor-hours	6,000	8,000
Machine-hours	2,000	10,000

What predetermined overhead rates would be used in Dept A and Dept B, respectively?

- A. 50% and \$8.00
- B. 50% and \$5.00
- C. \$15 and 110%
- D.** 200% and \$5.00

Dept. A Predetermined overhead rate = Estimated manufacturing overhead ÷ Direct labor cost
 = \$60,000 ÷ \$30,000 = 200% of direct labor cost

Dept. B Predetermined overhead rate = Estimated manufacturing overhead ÷ Estimated machine-hours
 = \$50,000 ÷ 10,000 = \$5 per machine-hour

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 3
Level: Easy

45. Simplex Company has the following estimated costs for next year:

Direct materials	\$15,000
Direct labor	\$55,000
Sales commissions	\$75,000
Salary of production supervisor	\$35,000
Indirect materials	\$5,000
Advertising expense	\$11,000
Rent on factory equipment	\$16,000

Simplex estimates that 10,000 direct labor and 16,000 machine-hours will be worked during the year. If overhead is applied on the basis of machine-hours, the overhead rate per hour will be:

- A. \$8.56
- B. \$7.63
- C. \$6.94
- D.** \$3.50

$$\begin{aligned} \text{Estimated manufacturing overhead} &= \text{Salary of production supervisor} + \text{Indirect materials} + \\ &\text{Rent on factory equipment} \\ &= \$35,000 + \$5,000 + \$16,000 \\ &= \$56,000 \end{aligned}$$

$$\begin{aligned} \text{Predetermined overhead rate} &= \text{Estimated manufacturing overhead} \div \text{Estimated machine-hours} \\ \text{Predetermined overhead rate} &= \$56,000 \div 16,000 \text{ machine-hours} \\ \text{Predetermined overhead rate} &= \$3.50 \text{ per machine-hour} \end{aligned}$$

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 3
Level: Medium

46. The balance in White Company's Work in Process inventory account was \$15,000 on August 1 and \$18,000 on August 31. The company incurred \$30,000 in direct labor cost during August and requisitioned \$25,000 in raw materials (all direct material). If the sum of the debits to the Manufacturing Overhead account total \$28,000 for the month, and if the sum of the credits totaled \$30,000, then:

- A. Finished Goods was debited for \$82,000 during the month.
- B. Finished Goods was credited for \$83,000 during the month.
- C. Manufacturing Overhead was underapplied by \$2,000 at the end of the month.
- D. Finished Goods was debited for \$85,000 during the month.

Work in Process Inventory			
Beg. Bal.	15,000	82,000	Transfer
DL	30,000		to FG*
DM	25,000		
MOH**	30,000		
End. Bal.	18,000		

Solve by:

$$*\$15,000 + \$30,000 + \$25,000 + 30,000 - \$18,000 = \$82,000$$

**total credits to manufacturing overhead

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Analysis
 Learning Objective: 4
 Learning Objective: 8
 Level: Hard

47. Melillo Corporation has provided data concerning the company's Manufacturing Overhead account for the month of October. Prior to the closing of the overapplied or underapplied balance to Cost of Goods Sold, the total of the debits to the Manufacturing Overhead account was \$67,000 and the total of the credits to the account was \$57,000. Which of the following statements is true?

- A. Manufacturing overhead for the month was overapplied by \$10,000.
- B. Actual manufacturing overhead for the month was \$67,000.**
- C. Manufacturing overhead applied to Work in Process for the month was \$67,000.
- D. Manufacturing overhead transferred from Finished Goods to Cost of Goods Sold during the month was \$57,000.

The debits to the Manufacturing Overhead account would be the actual manufacturing overhead costs (credits would be to Cash, Accounts Payable, etc.). The credits to the Manufacturing Overhead account would be the applied manufacturing overhead; the debit side of applying Manufacturing Overhead would be to the Work in Process Inventory account. If debits in the Manufacturing Overhead account exceed the credits, then manufacturing overhead is underapplied; if credits exceed debits, then manufacturing overhead is overapplied.

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Learning Objective: 8
Level: Medium

48. Waldvogel Corporation has provided data concerning the company's Manufacturing Overhead account for the month of April. Prior to the closing of the overapplied or underapplied balance to Cost of Goods Sold, the total of the debits to the Manufacturing Overhead account was \$55,000 and the total of the credits to the account was \$56,000. Which of the following statements is true?

- A. Manufacturing overhead for the month was underapplied by \$1,000.
- B. Manufacturing overhead applied to Work in Process for the month was \$56,000.**
- C. Actual manufacturing overhead incurred during the month was \$56,000.
- D. Manufacturing overhead transferred from Finished Goods to Cost of Goods Sold during the month was \$55,000.

The debits to the Manufacturing Overhead account would be the actual manufacturing overhead costs (credits would be to Cash, Accounts Payable, etc.). The credits to the Manufacturing Overhead account would be the applied manufacturing overhead; the debit side of applying Manufacturing Overhead would be to the Work in Process Inventory account. If debits in the Manufacturing Overhead account exceed the credits, then manufacturing overhead is underapplied; if credits exceed debits, then manufacturing overhead is overapplied.

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Learning Objective: 8
Level: Medium

49. Danoff Corporation has provided data concerning the company's Manufacturing Overhead account for the month of October. Prior to the closing of the overapplied or underapplied balance to Cost of Goods Sold, the total of the debits to the Manufacturing Overhead account was \$68,000 and the total of the credits to the account was \$77,000. Which of the following statements is true?

- A. Actual manufacturing overhead incurred during the month was \$77,000.
- B. Manufacturing overhead applied to Work in Process for the month was \$68,000.
- C. Manufacturing overhead transferred from Finished Goods to Cost of Goods Sold during the month was \$68,000.
- D.** Manufacturing overhead for the month was overapplied by \$9,000.

The debits to the Manufacturing Overhead account would be the actual manufacturing overhead costs (credits would be to Cash, Accounts Payable, etc.). The credits to the Manufacturing Overhead account would be the applied manufacturing overhead; the debit side of applying Manufacturing Overhead would be to the Work in Process Inventory account. If debits in the Manufacturing Overhead account exceed the credits, then manufacturing overhead is underapplied; if credits exceed debits, then manufacturing overhead is overapplied.

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Learning Objective: 8
Level: Medium

50. On December 1, Catherman Corporation had \$21,000 of raw materials on hand. During the month, the company purchased an additional \$61,000 of raw materials. During December, \$70,000 of raw materials were requisitioned from the storeroom for use in production. The debits to the Raw Materials account for the month of December total:

- A. \$82,000
- B. \$70,000
- C.** \$61,000
- D. \$21,000

Purchases (\$61,000) are debited to the Raw Materials account.

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Level: Easy

51. At the beginning of October, Cozier Corporation had \$34,000 of raw materials on hand. During the month, the company purchased an additional \$78,000 of raw materials. During October, \$92,000 of raw materials were requisitioned from the storeroom for use in production. The credits to the Raw Materials account for the month of October total:

- A. \$92,000
- B. \$34,000
- C. \$78,000
- D. \$112,000

Requisitions of raw materials (\$92,000) are credited to the Raw Materials account.

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Level: Easy

52. McMackin Corporation had \$35,000 of raw materials on hand on August 1. During the month, the company purchased an additional \$66,000 of raw materials. During August, \$81,000 of raw materials were requisitioned from the storeroom for use in production. These raw materials included both direct and indirect materials. The indirect materials totaled \$7,000. The debits to the Work in Process account as a consequence of the raw materials transactions in August total:

- A. \$66,000
- B. \$0
- C. \$74,000
- D. \$81,000

The debits to the Work in Process account as a consequence of the raw materials transactions in August total \$74,000 (\$81,000 total requisitioned less \$7,000 for indirect materials).

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Level: Easy

53. During August at Schlappi Corporation, \$80,000 of raw materials were requisitioned from the storeroom for use in production. These raw materials included both direct and indirect materials. The indirect materials totaled \$2,000. The journal entry to record this requisition would include a debit to Manufacturing Overhead of:

- A. \$2,000
- B. \$80,000
- C. \$78,000
- D. \$0

Indirect materials (\$2,000) are debited to Manufacturing Overhead.

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Level: Easy

54. Hards Corporation had \$38,000 of raw materials on hand on September 1. During the month, the company purchased an additional \$54,000 of raw materials. The journal entry to record the purchase of raw materials would include a:

- A. debit to Raw Materials of \$54,000
- B. debit to Raw Materials of \$92,000
- C. credit to Raw Materials of \$92,000
- D. credit to Raw Materials of \$54,000

Raw Materials	54,000	
 Accounts Payable		54,000

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Level: Easy

55. During May at Landreth Corporation, \$81,000 of raw materials were requisitioned from the storeroom for use in production. These raw materials included both direct and indirect materials. The indirect materials totaled \$7,000. The journal entry to record the requisition from the storeroom would include a:

- A. debit to Raw Materials of \$81,000
- B. debit to Work in Process of \$81,000
- C. credit to Manufacturing Overhead of \$7,000
- D. debit to Work in Process of \$74,000**

Total raw materials	\$81,000
Less: indirect raw materials.....	7,000
Total raw materials debited to Work in Process	\$74,000
	\$74,000

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Level: Easy

56. In December, Perone Inc. incurred \$78,000 of direct labor costs and \$4,000 of indirect labor costs. The journal entry to record the accrual of these wages would include a:

- A. debit to Work in Process of \$82,000
- B. debit to Manufacturing Overhead of \$4,000**
- C. credit to Work in Process of \$82,000
- D. credit to Manufacturing Overhead of \$4,000

Work in Process	78,000	
Manufacturing Overhead	4,000	
Wages Payable		82,000

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Level: Easy

57. Inks Corporation incurred \$69,000 of actual Manufacturing Overhead costs during June. During the same period, the Manufacturing Overhead applied to Work in Process was \$70,000. The journal entry to record the incurrence of the actual Manufacturing Overhead costs would include a:

- A. debit to Manufacturing Overhead of \$69,000
- B. debit to Work in Process of \$70,000
- C. credit to Manufacturing Overhead of \$69,000
- D. credit to Work in Process of \$70,000

Manufacturing Overhead	69,000	
Accounts Payable		69,000

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Level: Easy

58. Mincks Corporation incurred \$64,000 of actual Manufacturing Overhead costs during November. During the same period, the Manufacturing Overhead applied to Work in Process was \$61,000. The journal entry to record the application of Manufacturing Overhead to Work in Process would include a:

- A. debit to Work in Process of \$64,000
- B. credit to Manufacturing Overhead of \$61,000
- C. credit to Work in Process of \$64,000
- D. debit to Manufacturing Overhead of \$61,000

Work in Process	61,000	
Manufacturing Overhead		61,000

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Level: Easy

59. During October, Kreitner Inc. transferred \$73,000 from Work in Process to Finished Goods and recorded a Cost of Goods Sold of \$76,000. The journal entries to record these transactions would include a:

- A. credit to Work in Process of \$73,000
- B. credit to Cost of Goods Sold of \$76,000
- C. debit to Finished Goods of \$76,000
- D. credit to Finished Goods of \$73,000

Finished Goods	73,000	
Work in Process		73,000
Cost of Goods Sold	76,000	
Finished Goods		76,000

*AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Level: Easy*

60. During December, Fleeger Corporation incurred \$51,000 of direct labor costs and \$5,000 of indirect labor costs. The journal entry to record the accrual of these wages would include a:

- A. debit to Work in Process of \$56,000
- B. credit to Work in Process of \$51,000
- C. debit to Work in Process of \$51,000
- D. credit to Work in Process of \$56,000

Work in Process	51,000	
Manufacturing Overhead	5,000	
Wages Payable		56,000

*AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Level: Easy*

61. Lucy Sportswear manufactures a specialty line of T-shirts. The company uses a job-order costing system. During March, the following costs were incurred on Job ICU2: direct materials \$13,700 and direct labor \$4,800. In addition, selling and shipping costs of \$7,000 were incurred on the job. Manufacturing overhead was applied at the rate of \$25 per machine-hour and Job ICU2 required 800 machine-hours. If Job ICU2 consisted of 7,000 shirts, the Cost of Goods Sold per shirt was:

- A. \$6.50
- B. \$6.00
- C. \$5.70
- D. \$5.50**

Job ICU2 Costs	
Direct materials.....	\$13,700
Direct labor	4,800
Applied manufacturing overhead	20,000
(\$25 × 800 machine-hours)	20,000
Total product costs.....	\$38,500
	÷ 7,000 units
Product cost per unit.....	\$5.50

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 5
Learning Objective: 6
Level: Medium

62. Pricton Corporation has a job-order costing system. For the month of April, the following debits (credits) appeared in the Work in Process account:

April 1	Balance.....	\$12,000
April 30	Direct materials	\$40,000
April 30	Direct labor.....	\$30,000
April 30	Manufacturing overhead.....	\$27,000
April 30	To finished goods.....	(\$100,000)

Pricton applies overhead at a predetermined rate of 90% of direct labor cost. Job No. 50, the only job still in process at the end of April, has been charged with manufacturing overhead of \$2,250. The amount of direct materials charged to Job No. 50 was:

- A. \$9,000
- B. \$4,250**
- C. \$2,500
- D. \$2,250

Work in Process			
Bal.	12,000	100,000	FG
DM	40,000		
DL	30,000		
App MOH	27,000		
Bal.	9,000		

Ending Balance of Work in Process		\$9,000
Less:		
Direct labor (\$2,250 ÷ 90%)	2,500	
Manufacturing overhead	2,250	4,750
Direct materials charged to Job No. 50		\$4,250

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Analysis
 Learning Objective: 5
 Learning Objective: 7
 Level: Hard

63. Beaver Company used a predetermined overhead rate last year of \$2 per direct labor-hour, based on an estimate of 25,000 direct labor-hours to be worked during the year. Actual costs and activity during the year were:

Actual manufacturing overhead cost incurred	\$47,000
Actual direct labor-hours worked	24,000

The underapplied or overapplied overhead last year was:

- A. \$1,000 underapplied
- B. \$1,000 overapplied**
- C. \$3,000 overapplied
- D. \$2,000 underapplied

Actual manufacturing overhead	\$47,000	
Applied manufacturing overhead (24,000 × \$2)	48,000	
	<hr/>	
	\$1,000	overapplied
	<hr style="border-top: 3px solid black;"/>	

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 5
Learning Objective: 8
Level: Easy

64. Paul Company used a predetermined overhead rate during the year just completed of \$3.50 per direct labor-hour, based on an estimate of 22,000 direct labor-hours to be worked during the year. Actual overhead cost and activity during the year were:

Actual manufacturing overhead cost incurred	\$90,000
Actual direct labor-hours worked	25,000

The underapplied or overapplied overhead for the year would be:

- A. \$13,000 underapplied
- B. \$10,500 overapplied
- C. \$2,500 overapplied
- D.** \$2,500 underapplied

Actual manufacturing overhead	\$90,000	
Applied manufacturing overhead (25,000 × \$3.50)	87,500	
	\$2,500	underapplied
	\$2,500	

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 5
Learning Objective: 8
Level: Medium

65. Sweet Company applies overhead to jobs on the basis of 125% of direct labor cost. If Job 107 shows \$10,000 of manufacturing overhead applied, how much was the direct labor cost on the job?

- A. \$8,000
- B. \$12,500
- C. \$11,250
- D. \$10,000

Applied manufacturing overhead = 125% × Direct labor

Direct labor = Applied manufacturing overhead ÷ 125%

Direct labor = \$10,000 ÷ 125%

Direct labor = \$8,000

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 5
Level: Medium

66. Pitzer Corporation, a manufacturing company, has provided data concerning its operations for March. The beginning balance in the raw materials account was \$29,000 and the ending balance was \$38,000. Raw materials purchases during the month totaled \$74,000. Manufacturing overhead cost incurred during the month was \$106,000, of which \$7,000 consisted of raw materials classified as indirect materials. The direct materials cost for March was:

- A. \$83,000
- B. \$58,000**
- C. \$74,000
- D. \$65,000

Raw Materials			
Beg. Bal.	29,000	7,000	Indirect material to mfg. overhead
Purchases	74,000	?*	Direct material to work in process
End. Bal.	38,000		

$$*\$29,000 + \$74,000 - \$7,000 - \text{Direct materials cost} = \$38,000$$

$$\text{Direct materials cost} = \$58,000$$

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Application
 Learning Objective: 6
 Level: Medium

67. Jarratt Inc., a manufacturing company, has provided the following data for the month of September. The balance in the Work in Process inventory account was \$21,000 at the beginning of the month and \$24,000 at the end of the month. During the month, the company incurred direct materials cost of \$69,000 and direct labor cost of \$31,000. The actual manufacturing overhead cost incurred was \$54,000. The manufacturing overhead cost applied to Work in Process was \$58,000. The cost of goods manufactured for September was:

- A. \$158,000
- B. \$154,000
- C. \$151,000
- D. \$155,000**

Work in Process	
Beg. Bal.	21,000
DM	69,000
DL	31,000
App. MOH	58,000
End. Bal.	24,000

$$* \$21,000 + \$69,000 + \$31,000 + \$58,000 - \text{COGM} = \$24,000$$

$$\text{COGM} = \$155,000$$

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Application
 Learning Objective: 6
 Level: Medium

68. Erholm Inc. has provided the following data for the month of March. The balance in the Finished Goods inventory account at the beginning of the month was \$43,000 and at the end of the month was \$42,000. The cost of goods manufactured for the month was \$221,000. The actual manufacturing overhead cost incurred was \$45,000 and the manufacturing overhead cost applied to Work in Process was \$49,000. Assuming that the balance in the Manufacturing Overhead Account is reduced to zero, the adjusted cost of goods sold that would appear on the income statement for March is:

- A. \$218,000
- B. \$220,000
- C. \$222,000
- D. \$221,000

Finished Goods Inventory	
Beg. Bal.	43,000
COGM	221,000
End. Bal.	42,000

Unadjusted cost of goods sold	\$222,000
Less overapplied manufacturing overhead*	4,000
Adjusted cost of goods sold	\$218,000

*Overapplied manufacturing overhead	=	Applied manufacturing overhead	-	Actual manufacturing overhead
Overapplied manufacturing overhead	=	\$49,000	-	\$45,000
Overapplied manufacturing overhead	=	\$4,000		

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Application
 Learning Objective: 6
 Level: Medium

69. The following data have been provided by a company:

	Balance	Balance
Inventories.....	November 1	November 30
Raw materials.....	\$4,000	\$3,000
Work in process.....	\$12,000	\$15,000
Finished goods.....	\$24,000	\$27,000

Compute the amount of direct materials used during November if \$20,000 in raw materials were purchased during the month.

- A. \$21,000
- B. \$19,000
- C. \$18,000
- D. \$15,000

Beginning Balance + Purchased - Used = Ending Balance of Raw Materials

Used = Beginning Balance + Purchased - Ending Balance

Used = \$4,000 + \$20,000 - \$3,000

Used = \$21,000

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 7
Level: Easy

70. The actual manufacturing overhead incurred at Huberty Corporation during January was \$73,000, while the manufacturing overhead applied to Work in Process was \$78,000. The company's Cost of Goods Sold was \$349,000 prior to closing out its Manufacturing Overhead account. The company closes out its Manufacturing Overhead account to Cost of Goods Sold. Which of the following statements is true?

- A. Manufacturing overhead was overapplied by \$5,000; Cost of Goods Sold after closing out the Manufacturing Overhead account is \$354,000
- B. Manufacturing overhead was underapplied by \$5,000; Cost of Goods Sold after closing out the Manufacturing Overhead account is \$344,000
- C. Manufacturing overhead was underapplied by \$5,000; Cost of Goods Sold after closing out the Manufacturing Overhead account is \$354,000
- D. Manufacturing overhead was overapplied by \$5,000; Cost of Goods Sold after closing out the Manufacturing Overhead account is \$344,000**

Actual manufacturing overhead	\$73,000
Applied manufacturing overhead	78,000
	<hr/>
	\$5,000 overapplied
	<hr/>

Since applied manufacturing overhead exceeds actual manufacturing overhead, manufacturing overhead is overapplied.

Beginning cost of goods sold = \$349,000; overapplied manufacturing overhead reduces the cost of goods sold so the adjusted cost of goods sold is as follows:

$$\$349,000 - \$5,000 = \$344,000$$

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 8
Level: Medium

71. Molano Corporation has provided the following data concerning manufacturing overhead for June:

Actual manufacturing overhead incurred	\$69,000
Manufacturing overhead applied to Work in Process	\$76,000

The company's Cost of Goods Sold was \$255,000 prior to closing out its Manufacturing Overhead account. The company closes out its Manufacturing Overhead account to Cost of Goods Sold. Which of the following statements is true?

- A. Manufacturing overhead was underapplied by \$7,000; Cost of Goods Sold after closing out the Manufacturing Overhead account is \$248,000
- B. Manufacturing overhead was overapplied by \$7,000; Cost of Goods Sold after closing out the Manufacturing Overhead account is \$248,000**
- C. Manufacturing overhead was underapplied by \$7,000; Cost of Goods Sold after closing out the Manufacturing Overhead account is \$262,000
- D. Manufacturing overhead was overapplied by \$7,000; Cost of Goods Sold after closing out the Manufacturing Overhead account is \$262,000

The applied manufacturing overhead exceeds the actual manufacturing overhead by \$7,000 (\$76,000 - \$69,000), so \$7,000 would be overapplied and this amount would be deducted from cost of goods sold to arrive at the adjusted cost of goods sold of \$248,000 (\$255,000 - \$7,000).

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 8
Level: Medium

Munos Publishing Company uses a job-order costing system to collect costs related to the manufacture of specialty publications for corporate training.

72. What journal entry would Munos make to record the application of \$1,200 of manufacturing overhead to Job KN672?

- | | | | |
|----|----------------------------|---------|---------|
| A) | Work in Process | \$1,200 | |
| | Manufacturing Overhead | | \$1,200 |
| B) | Cost of Goods Manufactured | \$1,200 | |
| | Manufacturing Overhead | | \$1,200 |
| C) | Manufacturing Overhead | \$1,200 | |
| | Work in Process | | \$1,200 |
| D) | Cost of Goods Manufactured | \$1,200 | |
| | Work in Process | | \$1,200 |

- A. A
B. B
C. C
D. D

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 3
Learning Objective: 4
Level: Easy

73. What journal entry would Munos make to record the completion of Job KN668 at a total cost of \$7,600?

- | | | |
|-------------------------------|---------|---------|
| A) Work in Process | \$7,600 | |
| Finished Goods | | \$7,600 |
| B) Cost of Goods Manufactured | \$7,600 | |
| Work in Process | | \$7,600 |
| C) Finished Goods | \$7,600 | |
| Work in Process | | \$7,600 |
| D) Cost of Goods Manufactured | \$7,600 | |
| Finished Goods | | \$7,600 |

- A. A
- B. B
- C. C
- D. D

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 3
Learning Objective: 4
Level: Easy

74. What journal entry would Munos make to record \$9,500 of depreciation on its printing presses?

- | | | |
|----------------------------------|----------------|----------------|
| A) Work in Process | \$9,500 | |
| Manufacturing Overhead | | \$9,500 |
| B) Depreciation Expense | \$9,500 | |
| Accumulated Depreciation | | \$9,500 |
| C) Manufacturing Overhead | \$9,500 | |
| Accumulated Depreciation | | \$9,500 |
| D) Manufacturing Overhead | \$9,500 | |
| Depreciation Expense | | \$9,500 |

- A. A
 B. B
C. C
 D. D

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 3
Learning Objective: 4
Level: Medium

Acer Corporation, which applies manufacturing overhead on the basis of machine-hours, has provided the following data for its most recent year of operations.

Estimated manufacturing overhead	\$224,550
Estimated machine-hours	4,500
Actual manufacturing overhead	\$224,000
Actual machine-hours	4,440

The estimates of the manufacturing overhead and of machine-hours were made at the beginning of the year for the purpose of computing the company's predetermined overhead rate for the year.

75. The predetermined overhead rate is closest to:

- A. \$49.23
- B. \$49.90**
- C. \$49.78
- D. \$50.45

Estimated total manufacturing overhead.....	\$224,550
÷ Estimated total machine hours (MHs)	4,500 MHs
= Predetermined overhead rate (rounded).....	\$49.90 per MH

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Application
 Learning Objective: 3
 Level: Easy

76. The applied manufacturing overhead for the year is closest to:

- A. \$218,581
- B. \$221,023
- C. \$223,998
- D. \$221,556**

Estimated total manufacturing overhead.....	\$224,550
÷ Estimated total machine hours (MHs)	4,500 MHs
= Predetermined overhead rate (rounded).....	\$49.90 per MH

$$\text{Applied manufacturing overhead} = \text{Predetermined overhead rate} \times \text{Actual machine hours}$$

$$\text{Applied manufacturing overhead} = \$49.90 \times 4,440 = \$221,556$$

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Application
 Learning Objective: 3
 Learning Objective: 5
 Level: Easy

77. The overhead for the year was:

- A. \$2,994 underapplied
- B. \$2,444 overapplied
- C. \$2,444 underapplied**
- D. \$2,994 overapplied

Estimated total manufacturing overhead.....	\$224,550	
÷ Estimated total machine hours (MHs)	4,500 MHs	
= Predetermined overhead rate (rounded).....	\$49.90	per MH

Applied manufacturing overhead = Predetermined overhead rate × Actual machine hours

$$\begin{aligned}
 \text{Applied manufacturing overhead} &= \$49.90 \times 4,440 \\
 &= \$221,556
 \end{aligned}$$

Actual manufacturing overhead	\$224,000	
Applied manufacturing overhead.....	221,556	
	\$2,444	underapplied

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 3
Learning Objective: 5
Learning Objective: 8
Level: Easy

Baken Corporation applies manufacturing overhead on the basis of direct labor-hours. At the beginning of the most recent year, the company based its predetermined overhead rate on total estimated overhead of \$172,140 and 3,800 estimated direct labor-hours. Actual manufacturing overhead for the year amounted to \$171,000 and actual direct labor-hours were 3,880.

78. The predetermined overhead rate for the year was closest to:

- A. \$45.00
- B. \$44.07
- C. \$46.25
- D. \$45.30**

Estimated total manufacturing overhead.....	\$172,140
÷ Estimated total direct labor hours (DLHs).....	3,800 DLHs
= Predetermined overhead rate	\$45.30 per DLH

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Application
 Learning Objective: 3
 Level: Easy

79. The applied manufacturing overhead for the year was closest to:

- A. \$175,764**
- B. \$174,600
- C. \$179,450
- D. \$170,992

Estimated total manufacturing overhead.....	\$172,140
÷ Estimated total direct labor hours (DLHs).....	3,800 DLHs
= Predetermined overhead rate	\$45.30 per DLH

$$\text{Applied manufacturing overhead} = \text{Predetermined overhead rate} \times \text{Actual direct labor-hours}$$

$$\begin{aligned} \text{Applied manufacturing overhead} &= \$45.30 \cdot 3,880 \\ &= \$175,764 \end{aligned}$$

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Application
 Learning Objective: 3
 Learning Objective: 5
 Level: Easy

80. The overhead for the year was:

- A.** \$4,764 overapplied
- B. \$3,624 underapplied
- C. \$4,764 underapplied
- D. \$3,624 overapplied

Estimated total manufacturing overhead.....	\$172,140
÷ Estimated total direct labor hours (DLHs).....	3,800 DLHs
= Predetermined overhead rate	\$45.30 per DLH

$$\text{Applied manufacturing overhead} = \text{Predetermined overhead rate} \times \text{Actual direct labor-hours}$$

$$\text{Applied manufacturing overhead} = \$45.30 \cdot 3,880 = \$175,764$$

Actual manufacturing overhead.....	\$171,000
Applied manufacturing overhead.....	175,764
	\$4,764 overapplied

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Application
 Learning Objective: 3
 Learning Objective: 5
 Learning Objective: 8
 Level: Easy

Cahin Corporation applies manufacturing overhead on the basis of machine-hours. At the beginning of the most recent year, the company based its predetermined overhead rate on total estimated overhead of \$21,060. Actual manufacturing overhead for the year amounted to \$13,000 and actual machine-hours were 1,380. The company's predetermined overhead rate for the year was \$16.20 per machine-hour.

81. The predetermined overhead rate was based on how many estimated machine-hours?

- A. 1,380
- B. 802
- C. 225
- D.** 1,300

$$\text{Predetermined overhead rate} = \frac{\text{Estimated manufacturing overhead}}{\text{Estimated machine hours}}$$

$\$16.20 = \$21,060 \div \text{Estimated machine hours}$
 $\text{Estimated machine hours} = \$21,060 \div \$16.20$
 $\text{Estimated machine hours} = 1,300$

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 3
Level: Medium

82. The applied manufacturing overhead for the year was closest to:

- A. \$23,732
- B. \$21,060
- C.** \$22,356
- D. \$13,800

$$\text{Applied manufacturing overhead} = \text{Predetermined overhead rate} \times \text{Actual machine hours}$$

$\text{Applied manufacturing overhead} = \$16.20 \times 1,380$
 $\text{Applied manufacturing overhead} = \$22,356$

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 3
Learning Objective: 5
Level: Easy

83. The overhead for the year was:

- A. \$1,296 overapplied
- B. \$9,356 overapplied**
- C. \$9,356 underapplied
- D. \$1,296 underapplied

$$\text{Applied manufacturing overhead} = \text{Predetermined overhead rate} \times \text{Actual machine hours}$$

Applied manufacturing overhead = \$16.20 × 1,380

Applied manufacturing overhead = \$22,356

Actual manufacturing overhead	\$13,000	
Less applied manufacturing overhead	22,356	
	\$9,356	overapplied
	\$9,356	

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 3
Learning Objective: 5
Learning Objective: 8
Level: Easy

Loraine Company applies manufacturing overhead to jobs using a predetermined overhead rate of 70% of direct labor cost. Any underapplied or overapplied overhead cost is closed to Cost of Goods Sold at the end of the month. During August, the following transactions were recorded by the company:

Raw materials (all direct materials):	
Purchased during the month.....	\$30,000
Used in production.....	\$31,000
Labor:	
Direct labor hours worked during the month.....	3,000
Direct labor cost incurred.....	\$27,000
Indirect labor cost incurred.....	\$6,000
Manufacturing overhead costs incurred (total).....	\$19,000
Inventories:	
Raw materials (all direct) August 31.....	\$8,000
Work in process, August 1.....	\$7,600
Work in process, August 31*.....	\$15,000

*contains \$6,000 of direct labor cost

84. The amount of direct materials cost in the August 31 Work in Process inventory account was:

- A. \$10,200
- B. \$9,000
- C. \$4,800**
- D. \$4,200

August 31 Work in Process inventory balance	\$15,000
Less direct labor cost	6,000
Less manufacturing overhead applied (70% × \$6,000)	4,200
Direct materials cost in August 31 Work in Process inventory	\$4,800

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Analysis
Learning Objective: 4
Level: Hard

85. The Cost of Goods Manufactured for August was:

- A. \$69,600
- B. \$69,500**
- C. \$76,900
- D. \$84,500

Work in Process	
Beg. Bal.	7,600
RM Used	31,000
DL	27,000
App. MOH	*18,900
End. Bal.	15,000

* Applied manufacturing overhead = 70% of 27,000 = 18,900

** 7,600 + 31,000 + 27,000 + 18,900 - COGM = 15,000

COGM = \$69,500

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Analysis
 Learning Objective: 4
 Learning Objective: 6
 Level: Hard

86. The entry to dispose of the underapplied or overapplied overhead cost for the month would include:

- A. a credit of \$100 to Cost of Goods Sold.
- B. a credit of \$6,000 to Manufacturing Overhead.
- C. a debit of \$6,000 to Cost of Goods Sold.
- D. A credit of \$100 to the Manufacturing Overhead Account.**

Actual manufacturing overhead	\$19,000	
Applied manufacturing overhead (70% × 27,000)	18,900	
	\$100	underapplied
	\$100	

Cost of Goods Sold	\$100	
Manufacturing Overhead	\$100	

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Learning Objective: 8
Level: Hard

87. The balance on August 1 in the Raw Materials inventory account was:

- A. \$4,500
- B. \$7,000
- C. \$9,000**
- D. \$11,500

Raw Materials Inventory			
Beg. Bal.	?*	Used	31,000
Purchased	30,000		
End. Bal.	8,000		

Beginning Balance + Purchased - Used = Ending Balance

Beginning Balance + \$30,000 - \$31,000 = \$8,000

Beginning Balance = \$9,000

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Level: Medium

On July 1, Woolard Corporation had \$20,000 of raw materials on hand. During the month, the company purchased an additional \$53,000 of raw materials. During July, \$49,000 of raw materials were requisitioned from the storeroom for use in production. These raw materials included both direct and indirect materials. The indirect materials totaled \$5,000.

Prepare journal entries to record these events. Use those journal entries to answer the following questions:

88. The debits to the Raw Materials account for the month of July total:

- A.** \$53,000
- B. \$20,000
- C. \$73,000
- D. \$49,000

Purchases (\$53,000) are debited to the Raw Materials account.

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Level: Easy

89. The credits to the Raw Materials account for the month of July total:

- A. \$53,000
- B.** \$49,000
- C. \$20,000
- D. \$73,000

The \$49,000 of raw materials requisitioned are credited to the Raw Materials account.

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Level: Easy

90. The debits to the Work in Process account as a consequence of the raw materials transactions in July total:

- A. \$53,000
- B.** \$44,000
- C. \$0
- D. \$49,000

The amount of the debit entry to Work in Process is \$44,000 as a result of the raw materials transactions (total requisition \$49,000 less the portion that was indirect materials \$5,000, leaving \$44,000 to be debited).

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Level: Easy

91. The credits to the Work in Process account as a consequence of the raw materials transactions in July total:

- A. \$49,000
- B. \$53,000
- C.** \$0
- D. \$44,000

There are no credits to Work in Process as a result of the raw materials transactions.

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Level: Easy

92. The debits to the Manufacturing Overhead account as a consequence of the raw materials transactions in July total:

- A. \$44,000
- B. \$5,000**
- C. \$0
- D. \$49,000

The indirect materials (\$5,000) is the amount of the debit to the Manufacturing Overhead account.

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Level: Easy

93. The credits to the Manufacturing Overhead account as a consequence of the raw materials transactions in July total:

- A. \$0**
- B. \$5,000
- C. \$49,000
- D. \$44,000

There were no credits to the Manufacturing Overhead account as a result of the raw materials transactions.

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Level: Easy

On April 1, Bachler Corporation had \$37,000 of raw materials on hand. During the month, the company purchased an additional \$75,000 of raw materials. During April, \$88,000 of raw materials were requisitioned from the storeroom for use in production. These raw materials included both direct and indirect materials. The indirect materials totaled \$6,000.

94. The journal entry to record the purchase of raw materials would include a:

- A. credit to Raw Materials of \$112,000
- B. credit to Raw Materials of \$75,000
- C. debit to Raw Materials of \$75,000**
- D. debit to Raw Materials of \$112,000

Raw Materials	75,000	
Accounts Payable		75,000

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Level: Easy

95. The journal entry to record the requisition from the storeroom would include a:

- A. credit to Manufacturing Overhead of \$6,000
- B. debit to Raw Materials of \$88,000
- C. debit to Work in Process of \$82,000**
- D. debit to Work in Process of \$88,000

Work in Process*	82,000	
Manufacturing Overhead	6,000	
Raw Materials		88,000 *

$$\$88,000 - \$6,000 = \$82,000$$

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Level: Easy

During August, Sherill Corporation incurred \$78,000 of actual Manufacturing Overhead costs. During the same period, the Manufacturing Overhead applied to Work in Process was \$81,000.

96. The journal entry to record the incurrence of the actual Manufacturing Overhead costs would include a:

- A. debit to Manufacturing Overhead of \$78,000
- B. credit to Work in Process of \$81,000
- C. credit to Manufacturing Overhead of \$78,000
- D. debit to Work in Process of \$81,000

Manufacturing Overhead	78,000	
 Accounts Payable		78,000

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Level: Easy

97. The journal entry to record the application of Manufacturing Overhead to Work in Process would include a:

- A. credit to Work in Process of \$78,000
- B. debit to Manufacturing Overhead of \$81,000
- C. credit to Manufacturing Overhead of \$81,000
- D. debit to Work in Process of \$78,000

Work in Process	81,000	
 Manufacturing Overhead		81,000

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Level: Easy

The following partially completed T-accounts summarize last year's transactions for Kelshaw Company.

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At the end of the year, the company closes out the balance in the Manufacturing Overhead account to Cost of Goods Sold.

98. The indirect labor cost is:

- A. \$5,000
- B. \$12,000
- C. \$15,000
- D. \$35,000

Journal entry (4):

Sales Salaries Expense	10,000	
Work in Process	15,000	
Manufacturing Overhead	5,000	
Wages and Salaries Payable		30,000

The debit to Manufacturing Overhead (\$5,000) represents the indirect labor cost.

*AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Analysis
Learning Objective: 7
Level: Hard*

99. The cost of goods manufactured is:

- A. \$56,000
- B. \$50,000
- C. \$61,000
- D. \$55,000

Journal entry (7):

Finished Goods	50,000	
Work in Process		50,000*

*The above journal entry reflects the cost of goods manufactured.

*AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 6
Learning Objective: 7
Level: Medium*

100. The cost of goods sold (after adjustment for underapplied or overapplied overhead) is:

- A. \$55,000
- B. \$51,000
- C. \$54,000
- D. \$56,000**

Finished Goods			
Beg. Bal.	17,000	COGS	55,000*
(7)	50,000		
End. Bal.	12,000		

$$*17,000 \div 50,000 - \text{Cost of Goods Sold} = 12,000$$

$$\text{Cost of Goods Sold} = 55,000$$

Manufacturing Overhead			
(2)	8,000	(6)	28,000
(3)	12,000		
(4)	5,000		
(5)	4,000		
	1,000		

The \$1,000 debit balance represents underapplied overhead; the \$1,000 will be added to the original \$55,000 Cost of Goods Sold to arrive at an adjusted Cost of Goods Sold of \$56,000.

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Analysis
 Learning Objective: 6
 Learning Objective: 7
 Level: Hard

101. The manufacturing overhead applied is:

- A. \$28,000
- B. \$27,000
- C. \$29,000
- D. \$36,000

Journal entry (6):

Work in Process	28,000	
Manufacturing Overhead		28,000

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 5
Level: Medium

102. The cost of direct materials used is:

- A. \$20,000
- B. \$11,000
- C. \$12,000
- D. \$15,000

Journal entry (2):

Work in Process	12,000	
Manufacturing Overhead	8,000	
Raw Materials		20,000

The debit to Work in Process (\$12,000) represents the direct materials used.

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Analysis
Learning Objective: 7
Level: Hard

Dasilva Company had only one job in process on May 1. The job had been charged with \$1,400 of direct materials, \$6,192 of direct labor, and \$5,712 of manufacturing overhead cost. The company assigns overhead cost to jobs using the predetermined overhead rate of \$11.90 per direct labor-hour. During May, the following activity was recorded:

Raw materials (all direct materials):	
Beginning balance	\$8,500
Purchased during the month.....	\$48,000
Used in production.....	\$51,800
Labor:	
Direct labor-hours worked during the month.....	1,900
Direct labor cost incurred.....	\$24,510
Actual manufacturing overhead costs incurred.....	\$21,000
Inventories:	
Raw materials, May 30.....	?
Work in process, May 30.....	\$19,536

Work in process inventory on May 30 contains \$4,773 of direct labor cost. Raw materials consist solely of items that are classified as direct materials.

103. The balance in the raw materials inventory account on May 30 was:

- A. \$4,700
- B. \$43,300
- C. \$3,800
- D. \$39,500

Raw Materials			
Beg. Bal.	8,500	Used	51,800
Purchased	48,000		
End, Bal.	4,700		

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Application
 Learning Objective: 6
 Level: Medium

104. The cost of goods manufactured for May was:

- A. \$98,920
- B. \$92,688**
- C. \$120,800
- D. \$97,310

Raw materials used in production	\$51,800
Direct labor	24,510
Manufacturing overhead applied to work in process	22,610
($\$11.90 \times 1,900$).....	
Total manufacturing costs	\$98,920
Add: Work in process, beginning ($\$1,400 + \$6,192 + \$5,712$).....	13,304
	\$112,224
Deduct: Work in process, ending	19,536
Cost of goods manufactured	\$92,688

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Analysis
Learning Objective: 6
Level: Hard

105. The entry to dispose of the underapplied or overapplied overhead cost for the month would include a:

- A. credit of \$1,610 to Manufacturing Overhead
- B. debit of \$4,403 to Manufacturing Overhead
- C. credit of \$4,403 to Manufacturing Overhead
- D.** debit of \$1,610 to Manufacturing Overhead

Actual manufacturing overhead	\$21,000	
Applied manufacturing overhead (\$11.90 × 1,900)	22,610	
	(\$1,610)	
	\$1,610	overapplied

Journal entry:

Manufacturing Overhead	1,610	
Cost of Goods Sold		1,610

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Analysis
Learning Objective: 8
Level: Hard

Madtack Company's beginning and ending inventories for the month of November were as follows:

	November 1	November 30
Direct Materials	\$67,000	\$62,000
Work in Process	\$145,000	\$171,000
Finished Goods	\$85,000	\$78,000

Production data for month follow:

Direct labor cost incurred	\$200,000
Actual manufacturing overhead cost incurred	\$132,000
Direct materials purchases	\$165,000

Madtack applies manufacturing overhead cost to jobs at the rate of 70% of direct labor cost incurred. The company does not close underapplied or overapplied manufacturing overhead to Cost of Goods Sold until the end of the year.

106. Madtack Company's total manufacturing cost for November was:

- A. \$502,000
- B. \$510,000**
- C. \$363,000
- D. \$495,000

$$\text{Raw Materials Used} = \text{Beginning Balance of Raw Materials} + \text{Purchases} - \text{Ending Balance of Raw Materials}$$

$$\text{Raw Materials Used} = 67,000 + 165,000 - 62,000$$

$$\text{Raw Materials Used} = 170,000$$

Debits to Work in Process:

Raw materials used	\$170,000
Direct labor	200,000
Manufacturing overhead (70% × \$200,000)	140,000
Total debits to work in process	\$510,000
	\$510,000

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 5
Learning Objective: 6
Level: Medium

107. Madtack Company's cost of goods manufactured for November was:

- A. \$469,000
- B. \$477,000
- C. \$495,000
- D. \$484,000**

$$\text{Raw Materials Used} = \text{Beginning Balance of Raw Materials} + \text{Purchases} - \text{Ending Balance of Raw Materials}$$

$$\text{Raw Materials Used} = 67,000 + 165,000 - 62,000$$

$$\text{Raw Materials Used} = 170,000$$

Work in Process			
Beg. Bal.	145,000	COGM	484,000**
RM used	170,000		
DL	200,000		
MOH*	140,000		
End. Bal.	171,000		

* Manufacturing overhead = 70% × \$200,000

** 145,000 + 170,000 + 200,000 + 140,000 - 171,000 = 484,000

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Application
 Learning Objective: 5
 Learning Objective: 6
 Level: Medium

108. Madtack Company's Cost of Goods Sold for November was:

- A. \$484,000
- B. \$491,000**
- C. \$502,000
- D. \$476,000

$$\begin{aligned} \text{Raw Materials Used} &= \text{Beginning Balance of Raw Materials} + \text{Purchases} - \text{Ending Balance of Raw Materials} \\ \text{Raw Materials Used} &= 67,000 + 165,000 - 62,000 \\ \text{Raw Materials Used} &= 170,000 \end{aligned}$$

Work in Process

Beg. Bal.	145,000	COGM	484,000**
RM used	170,000		
DL	200,000		
MOH*	140,000		
End. Bal.	171,000		

* Manufacturing overhead = 70% × \$200,000
 ** 145,000 + 170,000 + 200,000 + 140,000 – 171,000 = 484,000

Cost of goods sold:

Finished goods inventory, beginning	\$85,000
Add: Cost of goods manufactured.....	484,000
Deduct: Finished goods inventory, ending	78,000
Cost of goods sold	<u>\$491,000</u>

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Application
 Learning Objective: 5
 Learning Objective: 6
 Level: Medium

109. Madtack Company's manufacturing overhead for November was:

- A.** overapplied by \$8,000
- B. underapplied by \$8,000
- C. overapplied by \$132,000
- D. underapplied by \$132,000

Actual manufacturing overhead	\$132,000	
Applied manufacturing overhead (70% × \$200,000)	140,000	
	\$8,000	overapplied
	\$8,000	

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 8
Level: Medium

Maverick Company had the following transactions last year:

1. **Raw materials purchased on account totaled \$165,000.**
2. **Raw materials issued from storeroom, \$140,000 (90% direct materials, 10% indirect materials).**
3. **Factory utility costs incurred, \$35,000.**
4. **Employee salaries and wages incurred, \$200,000 (80% direct labor, 10% indirect labor and 10% selling, general, and administrative).**
5. **Depreciation on factory equipment, \$30,000.**
6. **Depreciation on autos used by the sales staff, \$15,000.**
7. **Overhead was applied to production at a rate of 50% of direct labor cost.**
8. **Goods costing \$310,000 were transferred from Work in Process to Finished Goods.**

110. The total cost added to Work in Process during the year was:

- A.** \$366,000
- B. \$340,000
- C. \$420,000
- D. \$286,000

Raw materials (\$140,000 × 90%)	\$126,000
Direct labor (\$200,000 × 80%).....	160,000
Manufacturing overhead applied [(\$200,000 × 80%) × 50%]	80,000
Cost added to work in process	\$366,000
	\$366,000

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Application
 Learning Objective: 5
 Level: Medium

111. The cost of goods manufactured was:

- A. \$366,000
- B. \$420,000
- C. \$385,000
- D.** \$310,000

Transaction 8 contains the Cost of Goods Manufactured of \$310,000.

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Application
 Learning Objective: 6
 Level: Easy

The Lee Company uses a job-order costing system. The following data were recorded for June:

Job Number	June 1 Work in Process Inventory	Added During June	
		Direct Materials	Direct Labor
235	\$2,500	\$600	\$400
236	\$1,500	\$800	\$1,000
237	\$1,000	\$1,200	\$1,750
238	\$800	\$1,500	\$2,250

Overhead is charged to production at 80% of direct materials cost. Jobs 235, 237, and 238 were completed during June and transferred to finished goods. Jobs 235 and 238 have been delivered to customers.

112. Lee Company's cost of goods sold for June was:

- A. \$15,520
- B. \$10,170
- C. \$9,730**
- D. \$14,640

Cost Added During June

Job Number	June 1 Inventory	Direct Materials	Direct Labor	Overhead applied (DM × 80%)	Total job cost
235	\$2,500	\$600	\$400	\$480	\$3,980
236	\$1,500	\$800	\$1,000	\$640	\$3,940 ⁽⁴⁾
237	\$1,000	\$1,200	\$1,750	\$960	\$4,910 ⁽⁵⁾
238	\$800	\$1,500	\$2,250	\$1,200	\$5,750
Totals	\$5,800	\$4,100⁽¹⁾	\$5,400⁽²⁾	\$3,280⁽³⁾	\$18,580

Raw materials used	\$4,100	⁽¹⁾
Direct labor	5,400	⁽²⁾
Manufacturing overhead	3,280	⁽³⁾
Total manufacturing costs	12,780	
Add: Beginning work in process	5,800	
Available for use	18,580	
Less: Ending work in process	3,940	⁽⁴⁾
Cost of goods manufactured.....	\$14,640	

Beginning finished goods inventory	\$ 0	
Add: Cost of goods manufactured	14,640	
Goods available for sale	14,640	
Less: Ending finished goods inventory	4,910	⁽⁵⁾
Cost of goods sold.....	\$9,730	

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Application
 Learning Objective: 6
 Level: Medium

113. Lee's Work in Process inventory balance on June 30 was:

- A. \$4,100
- B. \$3,940**
- C. \$3,300
- D. \$9,450

Cost Added During June

Job Number	June 1 Inventory	Direct Materials	Direct Labor	Overhead applied (DM × 80%)	Total job cost
235	\$2,500	\$600	\$400	\$480	\$3,980
236	\$1,500	\$800	\$1,000	\$640	\$3,940 ⁽⁴⁾
237	\$1,000	\$1,200	\$1,750	\$960	\$4,910 ⁽⁵⁾
238	\$800	\$1,500	\$2,250	\$1,200	\$5,750
Totals	\$5,800	\$4,100⁽¹⁾	\$5,400⁽²⁾	\$3,280⁽³⁾	\$18,580

Work in process inventory = Job 236 = \$3,940

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Application
 Learning Objective: 6
 Learning Objective: 7
 Level: Medium

Rappaport Corporation reported the following data for the month of February:

Inventories:	Beginning	Ending
Raw materials	\$38,000	\$22,000
Work in process	\$24,000	\$15,000
Finished goods	\$29,000	\$30,000

Additional information:

Raw materials purchases	\$79,000
Direct labor cost.....	\$93,000
Manufacturing overhead cost incurred.....	\$51,000
Indirect materials included in manufacturing overhead cost incurred.....	\$7,000
Manufacturing overhead cost applied to Work in Process	\$48,000

114. The direct materials cost for February is:

- A. \$95,000
- B. \$88,000**
- C. \$79,000
- D. \$63,000

Direct materials:

Raw materials inventory, beginning	\$38,000
Add purchases of raw materials	79,000
Total raw materials available	117,000
Deduct raw materials inventory, ending	22,000
Raw materials used in production	95,000
Less: portion used for indirect materials.....	7,000
Direct materials cost	\$88,000

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 6
Level: Hard

115. The cost of goods manufactured for February is:

- A. \$220,000
- B. \$238,000**
- C. \$241,000
- D. \$223,000

Direct materials:

Raw materials inventory, beginning	\$38,000
Add purchases of raw materials	79,000
Total raw materials available	117,000
Deduct raw materials inventory, ending	22,000
Raw materials used in production	95,000
Less: portion used for indirect materials.....	7,000
Direct materials cost	\$88,000
Direct labor	93,000
Manufacturing overhead applied to work in process	48,000
Total manufacturing costs	229,000
Add: Work in process, beginning	24,000
	253,000
Deduct: Work in process, ending	15,000
Cost of goods manufactured	\$238,000

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Application
 Learning Objective: 6
 Level: Hard

116. The adjusted cost of goods sold that appears on the income statement for February is:

- A. \$240,000
- B. \$238,000
- C. \$239,000
- D. \$237,000

Direct materials:

Raw materials inventory, beginning	\$38,000
Add purchases of raw materials	79,000
Total raw materials available	117,000
Deduct raw materials inventory, ending	22,000
Raw materials used in production	95,000
Less: portion used for indirect materials.....	7,000
Direct materials cost	\$88,000
Direct labor	93,000
Manufacturing overhead applied to work in process	48,000
Total manufacturing costs	229,000
Add: Work in process, beginning	24,000
	253,000
Deduct: Work in process, ending	15,000
Cost of goods manufactured	\$238,000

Cost of goods sold:

Finished goods inventory, beginning	\$29,000
Add: Cost of goods manufactured	238,000
Goods available for sale	<u>267,000</u>
Deduct: Finished goods inventory, ending	30,000
Unadjusted cost of goods sold	<u>237,000</u>
Add: Underapplied manufacturing overhead*	3,000
Adjusted cost of goods sold	<u><u>\$240,000</u></u>

*Actual manufacturing overhead	\$51,000	
Applied manufacturing overhead	48,000	
To be added to cost of goods sold	<u>\$ 3,000</u>	underapplied

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Application
 Learning Objective: 6
 Learning Objective: 8
 Level: Hard

Smalling Inc. has provided the following data for the month of November:

Inventories:	Beginning	Ending
Work in process	\$19,000	\$11,000
Finished goods	\$46,000	\$58,000

Additional information:

Direct materials.....	\$75,000
Direct labor cost.....	\$97,000
Manufacturing overhead cost incurred.....	\$46,000
Manufacturing overhead cost applied to Work in Process	\$45,000

117. The cost of goods manufactured for November is:

- A. \$226,000
- B. \$218,000
- C. \$225,000**
- D. \$217,000

Direct materials cost	\$75,000
Direct labor	97,000
Manufacturing overhead applied to work in process	45,000
Total manufacturing costs	217,000
Add: Work in process, beginning	19,000
	236,000
Deduct: Work in process, ending	11,000
Cost of goods manufactured	\$225,000

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Application
 Learning Objective: 6
 Level: Medium

118. The adjusted cost of goods sold that appears on the income statement for November is:

- A. \$237,000
- B. \$225,000
- C. \$214,000
- D. \$213,000

Direct materials cost	\$75,000	
Direct labor	97,000	
Manufacturing overhead applied to work in process	45,000	
Total manufacturing costs	217,000	
Add: Work in process, beginning	19,000	
	236,000	
Deduct: Work in process, ending	11,000	
Cost of goods manufactured	\$225,000	

Cost of goods sold:

Finished goods inventory, beginning	\$46,000
Add: Cost of goods manufactured	225,000
Goods available for sale	<u>271,000</u>
Deduct: Finished goods inventory, ending	58,000
Cost of goods sold	<u>213,000</u>
Add: underapplied manufacturing overhead	1,000*
Adjusted cost of goods sold	<u>\$214,000</u>

*Actual manufacturing overhead	\$46,000	
Applied manufacturing overhead	45,000	
To be added to cost of goods sold	<u>\$1,000</u>	underapplied

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Application
 Learning Objective: 6
 Learning Objective: 8
 Level: Medium

The Garnet Company uses a job-order costing system. The following data were recorded for February:

Job Number	February 1 Work in Process Inventory	Added during February	
		Direct Materials	Direct Labor
1	\$1,500	\$400	\$300
2	\$2,000	\$600	\$750
3	\$500	\$1,000	\$1,500
4	\$250	\$1,300	\$2,400

Overhead is charged to jobs at the rate of 140% of direct labor cost.

Jobs 1, 2, and 3 were completed during February and transferred to finished goods. Job 3 has been delivered to the customer.

119. The manufacturing costs added to jobs during the month totaled:

- A. \$8,250
- B. \$11,880
- C. \$12,500
- D. \$15,180**

Job Number	February Work in Process Inventory	Added during February		Mfg. Overhead (DL × 140%)	Total cost of job
		Direct Materials	Direct Labor		
1	\$1,500	\$400	\$300	\$420	\$2,620
2	\$2,000	\$600	\$750	\$1,050	\$4,400
3	\$500	\$1,000	\$1,500	\$2,100	\$5,100
4	\$250	\$1,300	\$2,400	\$3,360	\$7,310
	<u>\$4,250</u>	<u>\$3,300</u>	<u>\$4,950</u>	<u>\$6,930</u>	<u>\$19,430</u>
Raw materials used in production					\$3,300
Direct labor					4,950
Manufacturing overhead applied to work in process					6,930
(140% × \$4,950).....					
Total manufacturing costs.....					<u>\$15,180</u>

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Application
 Learning Objective: 6
 Level: Medium

120. The work in process inventory on February 28 was:

- A. \$7,310
- B. \$9,500
- C. \$3,950
- D. \$7,060

Job Number	February 1 Work in Process Inventory	Added during February		Mfg. Overhead (DL × 140%)	Total cost of job
		Direct Materials	Direct Labor		
1	\$1,500	\$400	\$300	\$420	\$2,620
2	\$2,000	\$600	\$750	\$1,050	\$4,400
3	\$500	\$1,000	\$1,500	\$2,100	\$5,100
4	\$250	\$1,300	\$2,400	\$3,360	\$7,310
	<u>\$4,250</u>	<u>\$3,300</u>	<u>\$4,950</u>	<u>\$6,930</u>	<u>\$19,430</u>
Raw materials used in production					\$3,300
Direct labor					4,950
Manufacturing overhead applied to work in process					6,930
(140% × \$4,950).....					
Total manufacturing costs					<u>\$15,180</u>
Add: Work in process, beginning (\$1,500 + \$2,000 + \$500 + \$250)					4,250
					<u>\$19,430</u>
Deduct: Work in process, ending*					7,310
Cost of goods manufactured					<u>\$12,120</u>

*End Work in Process (Job 4):

February 1 beginning balance	\$250
Direct materials	1,300
Direct labor.....	2,400
Manufacturing overhead (140% × 2,400)	3,360
Total ending work in process.....	\$7,310

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Application
 Learning Objective: 6
 Level: Medium

121. The cost of goods sold during February was:

- A. \$5,100
- B. \$3,000
- C. \$12,120
- D. \$8,120

Job Number	February 1 Work in Process Inventory	Added during February		Mfg. Overhead (DL × 140%)	Total cost of job
		Direct Materials	Direct Labor		
1	\$1,500	\$400	\$300	\$420	\$2,620
2	\$2,000	\$600	\$750	\$1,050	\$4,400
3	\$500	\$1,000	\$1,500	\$2,100	\$5,100
4	\$250	\$1,300	\$2,400	\$3,360	\$7,310
	<u>\$4,250</u>	<u>\$3,300</u>	<u>\$4,950</u>	<u>\$6,930</u>	<u>\$19,430</u>

Raw materials used in production	\$3,300
Direct labor	4,950
Manufacturing overhead applied to work in process	6,930
(140% × \$4,950)	
Total manufacturing costs	\$15,180
Add: Work in process, beginning (\$1,500 + \$2,000 + \$500 + \$250)	4,250
	\$19,430
Deduct: Work in process, ending*	7,310
Cost of goods manufactured	<u>\$12,120</u>

*End Work in Process (Job 4):

February 1 beginning balance	\$250
Direct materials	1,300
Direct labor	2,400
Manufacturing overhead (140% × 2,400)	3,360
Total ending work in process	<u>\$7,310</u>

Cost of goods sold:

Finished goods inventory, beginning	\$ 0
Add: Cost of goods manufactured	12,120
Deduct: Finished goods inventory, ending*	7,020
Cost of goods sold	<u>\$5,100</u>

*Job 1 + Job 2 = \$2,620 + \$4,400 = \$7,020

*AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 6
Level: Medium*

Eccles Corporation uses a job-order costing system and applies overhead to jobs using a predetermined overhead rate. During the year the company's Finished Goods inventory account was debited for \$384,000 and credited for \$325,900. The ending balance in the Finished Goods inventory account was \$72,100. At the end of the year, manufacturing overhead was underapplied by \$5,400.

122. The balance in the Finished Goods inventory account at the beginning of the year was:

- A. \$72,100
- B. \$5,400
- C. \$14,000**
- D. \$58,100

Finished Goods			
Beg. Bal.	?*	Given	325,900
Given	384,000	End. Bal.	72,100

* **Beginning Balance = \$72,100 + \$325,900 - \$384,000**
Beginning Balance = \$14,000

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 7
Level: Medium

123. If the applied manufacturing overhead was \$174,000, the actual manufacturing overhead cost for the year was:

- A. \$193,400
- B. \$251,500
- C. \$179,400**
- D. \$168,600

Applied manufacturing overhead	\$174,000
Add amount of underapplied manufacturing overhead	5,400
Actual manufacturing overhead	\$179,400

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 7
Level: Medium

The following partially completed T-accounts summarize transactions for Faas Company during the year:

Raw Materials		Finished Goods	
Beg Bal	8,200	Beg Bal	5,100
	500		22,900
	6,600		22,700
Work in Process		Manufacturing Overhead	
Beg Bal	3,600		1,600
	5,000		9,100
	8,000		4,100
	9,100		3,300
	22,700		
Wages & Salaries Payable		Cost of Goods Sold	
17,200	Beg Bal	22,900	
	2,900		
	12,100		

124. The Cost of Goods Manufactured was:

- A. \$22,900
- B. \$22,700**
- C. \$8,200
- D. \$45,600

Journal entry for Cost of Goods Manufactured:

Finished Goods	22,700	
Work in Process		22,700

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 7
Level: Medium

125. The direct labor cost was:

- A. \$8,000
- B. \$12,100
- C. \$17,200
- D. \$11,600

Journal entry for direct labor cost:

Work in Process	8,000	
Manufacturing Overhead	4,100	
 Wages and Salaries Payable		12,100

The direct labor cost is the debit to Work in Process in this journal entry.

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Analysis
Learning Objective: 7
Level: Hard

126. The direct materials cost was:

- A. \$3,600
- B. \$6,600
- C. \$5,000
- D. \$8,000

Journal entry for direct materials used:

Work in Process	5,000	
Manufacturing Overhead	1,600	
 Raw Materials		6,600

The debit to Work in Process represents the direct materials cost.

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Analysis
Learning Objective: 7
Level: Hard

127. The manufacturing overhead applied was:

- A. \$4,100
- B. \$3,300
- C. \$15,400
- D.** \$9,100

The credit to Manufacturing Overhead is the manufacturing overhead applied.

*AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 7
Level: Medium*

128. The manufacturing overhead was:

- A. \$3,300 overapplied
- B. \$3,300 underapplied
- C.** \$100 overapplied
- D. \$100 underapplied

Actual manufacturing overhead	\$9,000
(1,600 + 4,100 + 3,300)	
Applied manufacturing overhead*	9,100
	<hr/>
	\$100 overapplied
	<hr/>

*The credit to Manufacturing Overhead is the manufacturing overhead applied.

*AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 7
Level: Medium*

Essay Questions

129. A number of companies in different industries are listed below:

- Natural gas production company
- Food caterer that supplies food for weddings and other special events
- Elevator production and installation company
- Coal mining company
- Contract printer that produces posters, books, and pamphlets to order
- Dairy farm

Required: For each company, indicate whether the company is most likely to use job-order costing or process costing.

- | | |
|--|-------------------|
| 1. Natural gas production company | Process Costing |
| 2. Food caterer that supplies food for weddings and other special events | Job-Order Costing |
| 3. Elevator production and installation company | Job-Order Costing |
| 4. Coal mining company | Process Costing |
| 5. Contract printer that produces posters, books, and pamphlets to order | Job-Order Costing |
| 6. Dairy farm | Process Costing |

AACSB: Analytic
AICPA BB: Industry
AICPA FN: Measurement
Bloom's: Comprehension
Learning Objective: 1
Level: Easy

130. Whether a company uses process costing or job-order costing depends on its industry. A number of companies in different industries are listed below:

Brick manufacturer

Contract printer that produces posters, books, and pamphlets to order

Natural gas production company

Dairy farm

Coal mining company

Specialty coffee roaster (roasts small batches of specialty coffee beans)

Required: For each company, indicate whether the company is most likely to use job-order costing or process costing.

- | | |
|---|--------------------------|
| 1. Brick manufacturer | Process Costing |
| 2. Contract printer that produces posters, books, and pamphlets to order | Job-Order Costing |
| 3. Natural gas production company | Process Costing |
| 4. Dairy farm | Process Costing |
| 5. Coal mining company | Process Costing |
| 6. Specialty coffee roaster (roasts small batches of specialty coffee beans) | Job-Order Costing |

AACSB: Analytic

AICPA BB: Industry

AICPA FN: Measurement

Bloom's: Comprehension

Learning Objective: 1

Level: Easy

131. Some companies use process costing and some use job-order costing. Which method a company uses depends on its industry. A number of companies in different industries are listed below:

Custom boat builder

Frozen cranberry juice processor

Concrete block manufacturer

Winery that produces a number of varietal wines

Aluminum refiner that makes aluminum ingots from bauxite ore

Required: For each company, indicate whether the company is most likely to use job-order costing or process costing.

- | | |
|--|--------------------------|
| 1. Custom boat builder | Job-Order Costing |
| 2. Frozen cranberry juice processor | Process Costing |
| 3. Concrete block manufacturer | Process Costing |
| 4. Winery that produces a number of varietal wines | Job-Order Costing |
| 5. Aluminum refiner that makes aluminum ingots from bauxite ore | Process Costing |

AACSB: Analytic

AICPA BB: Industry

AICPA FN: Measurement

Bloom's: Comprehension

Learning Objective: 1

Level: Easy

132. Granite Company uses a job-order costing system. The company applies manufacturing overhead to jobs using a predetermined overhead rate based on direct labor-hours. Last year, manufacturing overhead and direct labor-hours were estimated at \$80,000 and 16,000 hours respectively, for the year. In June, Job #315 was completed. Materials costs on the job totaled \$1,500 and labor costs totaled \$2,400 at \$6 per hour. At the end of the year, it was determined that the company worked 15,000 direct labor-hours for the year, and incurred \$78,000 in actual manufacturing overhead costs.

- Required: a. Determine the predetermined overhead rate for the year.
 b. Determine the amount of overhead charged to jobs during the year.
 c. Determine the amount of underapplied or overapplied overhead for the year.
 d. Assuming that 100 units were completed, determine the unit cost that would appear on the job cost sheet for Job #315.

a. $\$80,000 \div 16,000 \text{ DLHs} = \5 per DLH

b. $15,000 \text{ DLHs} \times \$5 \text{ per DLH} = \$75,000$

c. Actual overhead costs	\$78,000
Applied overhead costs	75,000
Underapplied overhead	<u>\$3,000</u>

d. Direct materials	\$1,500
Direct labor	2,400
Overhead applied	2,000
(400 DLHs* × \$5 per DLH)	
Total cost	<u>\$5,900</u>
Unit cost	\$59.00

* $\$2,400 \div \$6 \text{ per DLH} = 400 \text{ DLHs}$

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Application
 Learning Objective: 2
 Learning Objective: 3
 Learning Objective: 5
 Learning Objective: 8
 Level: Medium

133. Job 827 was recently completed. The following data have been recorded on its job cost sheet:

Direct materials	\$61,050	
Direct labor-hours	1,332	labor-hours
Direct labor wage rate	\$14	per labor-hour
Machine-hours	1,480	machine-hours
Number of units completed	3,700	units

The company applies manufacturing overhead on the basis of machine-hours. The predetermined overhead rate is \$13 per machine-hour.

Required: Compute the unit product cost that would appear on the job cost sheet for this job.

Cost Summary

Direct materials	\$61,050
Direct labor \$14 per DLH × 1,332 DLHs	18,648
Manufacturing overhead \$13 per MH × 1,480 MHs	19,240
Total cost	<u>\$98,938</u>
Unit product cost	<u>\$26.74</u>

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 2
Learning Objective: 5
Level: Easy

134. Job 484 was recently completed. The following data have been recorded on its job cost sheet:

Direct materials	\$57,240	
Direct labor-hours	1,692	DLHs
Direct labor wage rate	\$12	per DLH
Number of units completed	3,600	units

The company applies manufacturing overhead on the basis of direct labor-hours. The predetermined overhead rate is \$24 per direct labor-hour.

Required: Compute the unit product cost that would appear on the job cost sheet for this job.

Cost Summary

Direct materials	\$57,240
Direct labor \$12 per DLH × 1,692 DLHs	20,304
Manufacturing overhead \$24 per DLH × 1,692 DLHs ..	40,608
Total cost	<u>\$118,152</u>
Unit product cost	\$32.82

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 2
Learning Objective: 5
Level: Easy

135. Alake Company is a manufacturing firm that uses job-order costing. At the beginning of the year, the company's inventory balances were as follows:

Raw materials	\$19,000
Work in process	\$82,000
Finished goods	\$32,000

The company applies overhead to jobs using a predetermined overhead rate based on machine-hours. At the beginning of the year, the company estimated that it would work 36,000 machine-hours and incur \$216,000 in manufacturing overhead cost. The following transactions were recorded for the year:

- a. Raw materials were purchased, \$443,000.
 - b. Raw materials were requisitioned for use in production, \$450,000 (\$435,000 direct and \$15,000 indirect).
 - c. The following employee costs were incurred: direct labor, \$229,000; indirect labor, \$54,000; and administrative salaries, \$117,000.
 - d. Selling costs, \$119,000.
 - e. Factory utility costs, \$21,000.
 - f. Depreciation for the year was \$121,000 of which \$114,000 is related to factory operations and \$7,000 is related to selling, general, and administrative activities.
 - g. Manufacturing overhead was applied to jobs. The actual level of activity for the year was 38,000 machine-hours.
 - h. The cost of goods manufactured for the year was \$910,000.
 - i. Sales for the year totaled \$1,173,000 and the costs on the job cost sheets of the goods that were sold totaled \$895,000.
 - j. The balance in the Manufacturing Overhead account was closed out to Cost of Goods Sold.
- Required: Prepare the appropriate journal entry for each of the items above (a. through j.). You can assume that all transactions with employees, customers, and suppliers were conducted in cash.

a.	Raw Materials Inventory	443,000	
	Cash		443,000
b.	Work in Process Inventory	435,000	
	Manufacturing Overhead	15,000	
	Raw Materials Inventory		450,000
c.	Work in Process Inventory	229,000	
	Manufacturing Overhead	54,000	
	Administrative Salary Expense	117,000	
	Cash		400,000
d.	Selling Expenses	119,000	
	Cash		119,000
e.	Manufacturing Overhead	21,000	
	Cash		21,000
f.	Manufacturing Overhead	114,000	
	Depreciation Expense	7,000	
	Accumulated Depreciation		121,000
g.	Work in Process	228,000	
	Manufacturing Overhead		228,000
	($\$216,000/36,000 = \$6 \times 38,000 = \$228,000$)		
h.	Finished Goods	910,000	
	Work in Process		910,000
i.	Cash	1,173,000	
	Sales		1,173,000
	Cost of Goods Sold	895,000	
	Finished Goods		895,000
j.	Manufacturing Overhead	24,000	
	Cost of Goods Sold		24,000

Chapter 02 - Systems Design: Job-Order Costing

AACSB: Analytic

AICPA BB: Critical Thinking

AICPA FN: Measurement

Bloom's: Application

Learning Objective: 3

Learning Objective: 4

Learning Objective: 5

Learning Objective: 8

Level: Medium

136. Babbel Company is a manufacturing firm that uses job-order costing. The company's inventory balances were as follows at the beginning and end of the year:

	Beginning Balance	Ending Balance
Raw materials	\$21,000	\$24,000
Work in process	\$40,000	\$22,000
Finished goods	\$26,000	\$41,000

The company applies overhead to jobs using a predetermined overhead rate based on machine-hours. At the beginning of the year, the company estimated that it would work 38,000 machine-hours and incur \$266,000 in manufacturing overhead cost. The following transactions were recorded for the year:

- Raw materials were purchased, \$300,000.
- Raw materials were requisitioned for use in production, \$297,000 (\$281,000 direct and \$16,000 indirect).
- The following employee costs were incurred: direct labor, \$389,000; indirect labor, \$62,000; and administrative salaries, \$176,000.
- Selling costs, \$160,000.
- Factory utility costs, \$19,000.
- Depreciation for the year was \$143,000 of which \$137,000 is related to factory operations and \$6,000 is related to selling, general, and administrative activities.
- Manufacturing overhead was applied to jobs. The actual level of activity for the year was 34,000 machine-hours.
- Sales for the year totaled \$1,283,000.

Required: a. Prepare a schedule of cost of goods manufactured in good form.

b. Was the overhead underapplied or overapplied? By how much?

c. Prepare an income statement for the year in good form. The company closes any underapplied or overapplied overhead to Cost of Goods Sold.

a. Schedule of cost of goods manufactured

Estimated total manufacturing overhead (a)	\$266,000
Estimated total machine-hours (b).....	38,000
Predetermined overhead rate (a) ÷ (b).....	\$7.00
Actual total machine-hours (a).....	34,000
Predetermined overhead rate (b).....	\$7.00
Overhead applied (a) × (b)	\$238,000
Direct materials:	
Raw materials inventory, beginning.....	\$21,000
Add: purchases of raw materials.....	300,000
Total raw materials available	321,000
Deduct: raw materials inventory, ending	24,000
Raw materials used in production.....	297,000
Less: indirect materials.....	16,000
Direct materials.....	281,000
Direct labor.....	389,000
Manufacturing overhead applied	238,000
Total manufacturing costs	908,000
Add: Beginning work in process inventory.....	40,000
	948,000
Deduct: Ending work in process inventory.....	22,000
Cost of goods manufactured.....	<u>\$926,000</u>

b. Overhead underapplied or overapplied

Actual manufacturing overhead cost incurred:	
Indirect materials	\$16,000
Indirect labor.....	62,000
Factory utilities	19,000
Factory depreciation.....	137,000
Manufacturing overhead cost incurred.....	234,000
Manufacturing overhead applied	238,000
Overapplied overhead.....	<u>(\$4,000)</u>

c. Income Statement

Beginning finished goods inventory	\$26,000	
Cost of goods manufactured	926,000	
Goods available for sale	952,000	
Ending finished goods inventory	41,000	
Unadjusted cost of goods sold	911,000	
Deduct: overapplied overhead	(4,000)	
Adjusted cost of goods sold	\$907,000	
Sales		\$1,283,000
Cost of goods sold (adjusted)		907,000
Gross margin		376,000
Selling and administrative expenses:		
Administrative salaries	\$176,000	
Selling costs	160,000	
Depreciation	6,000	342,000
Net operating income		\$34,000

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Analysis
Learning Objective: 3
Learning Objective: 5
Learning Objective: 6
Learning Objective: 8
Level: Medium

137. The Allen Company uses a job-order costing system. The following activity took place during the month of March:

- a. Raw materials purchased, \$35,000.
- b. Raw materials (all direct) requisitioned for use in production, \$34,500.
- c. Salaries and wages cost incurred:
 - Direct labor cost, \$39,000
 - Indirect labor cost, \$13,000
 - Sales salaries, \$20,000
- d. Depreciation on factory equipment, \$12,000.
- e. Factory utility costs incurred, \$7,500.
- f. Manufacturing overhead was applied at a rate of 200% of direct materials used.
- g. Advertising expense incurred, \$40,000.
- h. Cost of Goods Manufactured, \$160,000.
- i. Cost of Goods Sold, \$158,000.

Required: Prepare journal entries to record the information above. Key your entries by the letters a through i. Assume all purchases are made on account.

a.	Raw materials inventory	35,000	
	Accounts payable		35,000
b.	Work in process	34,500	
	Raw materials inventory		34,500
c.	Work in process	39,000	
	Manufacturing overhead	13,000	
	Sales salary expense	20,000	
	Wages and salaries payable		72,000
d.	Manufacturing overhead	12,000	
	Accumulated depreciation		12,000
e.	Manufacturing overhead	7,500	
	Accounts payable		7,500
f.	Work in process	69,000	
	Manufacturing overhead		69,000
	\$34,500 × 200% = \$69,000		
g.	Advertising expense	40,000	
	Accounts payable		40,000
h.	Finished goods	160,000	
	Work in process		160,000
i.	Cost of goods sold	158,000	
	Finished goods		158,000

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Learning Objective: 6
Level: Medium

138. During December, Ketchum Corporation purchased \$64,000 of raw materials on credit to add to its raw materials inventory. A total of \$80,000 of raw materials was requisitioned from the storeroom for use in production. These requisitioned raw materials included \$7,000 of indirect materials.

Required: Prepare journal entries to record the purchase of materials and their use in production.

Raw Materials	64,000	
Accounts Payable		64,000

Work in Process	73,000	
Manufacturing Overhead	7,000	
Raw Materials		80,000

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Application
Learning Objective: 4
Level: Easy

139. During May, Sarkin Corporation incurred \$69,000 of actual Manufacturing Overhead costs. During the same period, the Manufacturing Overhead applied to Work in Process was \$73,000.

Required: Prepare journal entries to record the incurrence of manufacturing overhead and the application of manufacturing overhead to Work in Process.

Manufacturing Overhead	69,000	
Various accounts		69,000

Work in Process	73,000	
Manufacturing Overhead		73,000

AACSB: Analytic
AICPA BB: Critical Thinking
AICPA FN: Measurement
Bloom's: Analysis
Learning Objective: 4
Level: Easy

140. The following cost data relate to the manufacturing activities of the Kamas Company during the most recent year:

Manufacturing overhead costs incurred during the year:	
Property taxes	\$1,600
Utilities, factory	2,600
Indirect labor	5,100
Depreciation, factory	13,000
Insurance, factory	2,500
Total actual manufacturing overhead cost.....	<u>\$24,800</u>
 Other costs incurred during the year:	
Purchases of raw materials.....	\$15,000
Direct labor cost.....	\$22,000
 Inventories:	
Raw materials, beginning.....	\$5,000
Raw materials, ending.....	\$4,400
Work in process, beginning.....	\$3,500
Work in process, ending.....	\$4,500

The company uses a predetermined overhead rate to charge overhead cost to production. The rate for the year just completed was \$4.00 per machine-hour; a total of 6,000 machine-hours were recorded for the year.

Required: a. Compute the amount of underapplied or overapplied overhead cost for the year just ended.

b. Prepare a schedule of cost of goods manufactured for the year.

a.	Actual total manufacturing overhead cost	\$24,800
	Manufacturing overhead applied: 6,000 × \$4.00	<u>24,000</u>
	Underapplied manufacturing overhead.....	<u>\$800</u>

b. **Kamas Company**
Schedule of Cost of Goods Manufactured
For the Year Just Ended

Direct materials:	
Raw materials, beginning	\$5,000
Add purchases of raw materials	<u>15,000</u>
Raw materials available for use	20,000
Deduct raw materials inventory, ending.....	<u>4,400</u>
Raw materials used in production	15,600
Direct labor	22,000
Manufacturing overhead applied to work in process...	<u>24,000</u>
Total manufacturing costs	61,600
Add beginning work in process.....	<u>3,500</u>
	65,100
Deduct ending work in process	<u>4,500</u>
Cost of goods manufactured.....	<u>\$60,600</u>

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Analysis
 Learning Objective: 5
 Learning Objective: 6
 Learning Objective: 8
 Level: Medium

141. Weisinger Corporation has provided the following data for the month of January:

Inventories:	Beginning	Ending
Raw materials	\$28,000	\$29,000
Work in process	\$16,000	\$14,000
Finished goods	\$42,000	\$54,000

Additional information:

Raw materials purchases	\$56,000
Direct labor cost.....	\$87,000
Manufacturing overhead cost incurred.....	\$51,000
Indirect materials included in manufacturing overhead cost incurred.....	\$3,000
Manufacturing overhead cost applied to Work in Process ...	\$55,000

Required: Prepare a Schedule of Cost of Goods Manufactured and a Schedule of Cost of Goods Sold in good form.

Cost of Goods Manufactured

Direct materials:		
Beginning materials inventory	\$28,000	
Add: Purchases of raw materials	<u>56,000</u>	
Raw materials available for use	84,000	
Deduct: Ending raw materials inventory.....	<u>29,000</u>	
Raw materials used in production	55,000	
Less indirect materials included in manufacturing overhead incurred.....	3,000	\$52,000
Direct labor.....		<u>87,000</u>
Manufacturing overhead applied to Work in Process .		<u>55,000</u>
Total manufacturing costs		194,000
Add: Beginning work in process inventory.....		<u>16,000</u>
		210,000
Deduct: Ending work in process inventory		<u>14,000</u>
Cost of goods manufactured.....		<u>\$196,000</u>

Cost of Goods Sold

Beginning finished goods inventory	\$42,000
Add: Cost of goods manufactured	<u>196,000</u>
Goods available for sale	238,000
Deduct: Ending finished goods inventory	<u>54,000</u>
Unadjusted cost of goods sold	184,000
Deduct: Overapplied overhead.....	<u>4,000</u>
Adjusted cost of goods sold	<u>\$180,000</u>

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Analysis
 Learning Objective: 6
 Level: Medium

142. Ramil Corporation has provided the following data for the most recent month:

Raw materials, beginning balance	\$14,000
Work in process, beginning balance	\$31,000
Finished Goods, beginning balance	\$41,000
Transactions:	
(1) Raw materials purchases	\$88,000
(2) Raw materials used in production (all direct materials).....	\$91,000
(3) Direct labor.....	\$86,000
(4) Manufacturing overhead costs incurred	\$76,000
(5) Manufacturing overhead applied	\$87,000
(6) Cost of units completed and transferred from Work in Process to Finished Goods	\$286,000
(7) Any overapplied or underapplied manufacturing overhead is closed to Cost of Goods Sold	?
(8) Finished goods are sold.....	\$319,000

Required: Prepare T-accounts for Raw Materials, Work in Process, Finished Goods, Manufacturing Overhead, and Cost of Goods Sold. Record the beginning balances and each of the transactions listed above. Finally, determine the ending balances.

Raw Materials			
Beginning balance	\$14,000	(2) Direct materials	\$64,000
(1) Raw materials purchases	\$66,000		
Ending balance	\$16,000		
Work in Process			
Beginning balance	\$31,000	(6) Transfer to FG	\$286,000
(2) Direct materials	\$91,000		
(3) Direct labor	\$86,000		
(5) Manufacturing overhead applied	\$87,000		
Ending balance	\$9,000		
Finished Goods			
Beginning balance	\$41,000	(8) Cost of goods sold	\$319,000
(6) Transfer from WIP	\$286,000		
Ending balance	\$8,000		
Manufacturing Overhead			
(4) Manufacturing overhead incurred	\$76,000	(5) Manufacturing overhead applied	\$87,000
(7) To COGS	\$11,000	Manufacturing overhead overapplied	\$11,000
Cost of Goods Sold			
(8) Cost of goods sold	\$319,000	(7) Manufacturing overhead overapplied	\$11,000
	\$308,000		

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Application
 Learning Objective: 7
 Level: Medium

143. During November, Jiminez Corporation recorded the following:

Raw materials, beginning balance	\$14,000
Work in process, beginning balance	\$39,000
Finished Goods, beginning balance	\$50,000
Transactions:	
(1) Raw materials purchases	\$66,000
(2) Raw materials used in production (all direct materials).....	\$64,000
(3) Direct labor.....	\$70,000
(4) Manufacturing overhead costs incurred	\$68,000
(5) Manufacturing overhead applied	\$81,000
(6) Cost of units completed and transferred from Work in Process to Finished Goods	\$231,000
(7) Any overapplied or underapplied manufacturing overhead is closed to Cost of Goods Sold	?
(8) Finished goods are sold.....	\$251,000

Required: Prepare T-accounts for Raw Materials, Work in Process, Finished Goods, and Manufacturing Overhead, and Cost of Goods Sold. Record the beginning balances and each of the transactions listed above. Finally, determine the ending balances.

Raw Materials			
Beginning balance	\$14,000	(2) Direct materials	\$64,000
(1) Raw materials purchases	\$66,000		
Ending balance	\$16,000		

Work in Process			
Beginning balance	\$39,000	(6) Transfer to FG	\$231,000
(2) Direct materials	\$64,000		
(3) Direct labor	\$70,000		
(5) Manufacturing overhead applied	\$81,000		
Ending balance	\$23,000		

Finished Goods			
Beginning balance	\$50,000	(8) Cost of goods sold	\$251,000
(6) Transfer from WIP	\$231,000		
Ending balance	\$30,000		
Manufacturing Overhead			
(4) Manufacturing overhead incurred	\$68,000	(5) Manufacturing overhead applied	\$81,000
(7) To COGS	\$13,000	Manufacturing overhead overapplied	\$13,000
Cost of Goods Sold			
(8) Cost of goods sold	\$251,000	(7) Manufacturing overhead overapplied	\$13,000
	\$238,000		

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Application
 Learning Objective: 7
 Level: Medium

144. Hirpara Inc. has provided the following data for July:

Raw materials, beginning balance	\$12,000
Work in process, beginning balance	\$32,000
Finished Goods, beginning balance	\$41,000
Transactions:	
(1) Raw materials purchases	\$64,000
(2) Raw materials used in production (all direct materials).....	\$69,000
(3) Direct labor.....	\$83,000
(4) Manufacturing overhead costs incurred	\$62,000
(5) Manufacturing overhead applied	\$63,000
(6) Cost of units completed and transferred from Work in Process to Finished Goods	\$208,000
(7) Any overapplied or underapplied manufacturing overhead is closed to Cost of Goods Sold	?
(8) Finished goods are sold.....	\$234,000

Required: Prepare T-accounts for Raw Materials, Work in Process, Finished Goods, and Manufacturing Overhead, and Cost of Goods Sold. Record the beginning balances and each of the transactions listed above. Finally, determine the ending balances.

Raw Materials			
Beginning balance	\$12,000	(2) Direct materials	\$69,000
(1) Raw materials purchases	\$64,000		
Ending balance	\$7,000		
Work in Process			
Beginning balance	\$32,000	(6) Transfer to FG	\$208,000
(2) Direct materials	\$69,000		
(3) Direct labor	\$83,000		
(5) Manufacturing overhead applied	\$63,000		
Ending balance	\$39,000		
Finished Goods			
Beginning balance	\$41,000	(8) Cost of goods sold	\$234,000
(6) Transfer from WIP	\$208,000		
Ending balance	\$15,000		
Manufacturing Overhead			
(4) Manufacturing overhead incurred	\$62,000	(5) Manufacturing overhead applied	\$63,000
(7) To COGS	\$1,000	Manufacturing overhead overapplied	\$1,000
Cost of Goods Sold			
(8) Cost of goods sold	\$234,000	(7) Manufacturing overhead overapplied	\$1,000
	\$233,000		

AACSB: Analytic
 AICPA BB: Critical Thinking
 AICPA FN: Measurement
 Bloom's: Application
 Learning Objective: 7
 Level: Medium