

# Chapter R Pretest Form A

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. List the factors of 24.

1. \_\_\_\_\_

2. Write the prime factorization of 750.

2. \_\_\_\_\_

3. Find the LCM of 6, 14, and 18.

3. \_\_\_\_\_

4. Write  $\frac{7}{12}$  as an equivalent expression with a denominator of 60.

4. \_\_\_\_\_

5. Simplify  $\frac{28}{42}$ .

5. \_\_\_\_\_

Perform the indicated operations and simplify.

6.  $\frac{3}{8} \cdot \frac{4}{7}$

6. \_\_\_\_\_

7.  $\frac{1}{6} + \frac{3}{5}$

7. \_\_\_\_\_

8.  $\frac{2}{9} \div \frac{3}{5}$

8. \_\_\_\_\_

9.  $\frac{3}{5} - \frac{1}{3}$

9. \_\_\_\_\_

10.  $4\frac{1}{3} + 6\frac{3}{8}$

10. \_\_\_\_\_

11.  $8 \cdot 9\frac{3}{4}$

11. \_\_\_\_\_

Perform the indicated operations.

12.  $27 + 0.4 + 2.07$

12. \_\_\_\_\_

13.  $19 - 12.37$

13. \_\_\_\_\_

14.  $14.7 \cdot 0.12$

14. \_\_\_\_\_

15.  $132.09 \div 3.7$

15. \_\_\_\_\_

## Chapter R Pretest Form A (cont.)

Name: \_\_\_\_\_

16. Write 6.08 as a fraction. Do not simplify.

16. \_\_\_\_\_

17. Write  $\frac{5}{16}$  as a decimal.

17. \_\_\_\_\_

18. Round 79.7168 to the nearest hundredth.

18. \_\_\_\_\_

19. Write 23.1% as a decimal.

19. \_\_\_\_\_

20. Write 0.4 as a percent.

20. \_\_\_\_\_

# Chapter R Pretest Form B

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. List the factors of 18. 1. \_\_\_\_\_
2. Write the prime factorization of 120. 2. \_\_\_\_\_
3. Find the LCM of 10, 18, and 24. 3. \_\_\_\_\_
4. Write  $\frac{7}{16}$  as an equivalent expression with a denominator of 64. 4. \_\_\_\_\_
5. Simplify  $\frac{42}{96}$ . 5. \_\_\_\_\_

Perform the indicated operations and simplify.

6.  $\frac{2}{3} \cdot \frac{9}{24}$  6. \_\_\_\_\_
7.  $\frac{1}{5} + \frac{2}{3}$  7. \_\_\_\_\_
8.  $\frac{4}{5} \div \frac{5}{3}$  8. \_\_\_\_\_
9.  $\frac{4}{5} - \frac{2}{25}$  9. \_\_\_\_\_
10.  $10\frac{1}{2} + 14\frac{1}{4}$  10. \_\_\_\_\_
11.  $15 \cdot 3\frac{2}{5}$  11. \_\_\_\_\_

Perform the indicated operations.

12.  $45 + 0.6 + 3.07$  12. \_\_\_\_\_
13.  $24 - 18.64$  13. \_\_\_\_\_
14.  $21.6 \cdot 0.73$  14. \_\_\_\_\_
15.  $95.38 \div 3.8$  15. \_\_\_\_\_

## Chapter R Pretest Form B (cont.)

Name: \_\_\_\_\_

16. Write 8.14 as a fraction. Do not simplify.

16. \_\_\_\_\_

17. Write  $\frac{7}{16}$  as a decimal.

17. \_\_\_\_\_

18. Round 26.6289 to the nearest hundredth.

18. \_\_\_\_\_

19. Write 90.7% as a decimal.

19. \_\_\_\_\_

20. Write 0.9 as a percent.

20. \_\_\_\_\_

# Chapter R Test Form A

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. Fill in the blank: A fraction whose numerator is less than its denominator is called a(n) \_\_\_\_\_.  
improper fraction or proper fraction

1. \_\_\_\_\_

2. List the factors of 20.

2. \_\_\_\_\_

3. Write the prime factorization of 252.

3. \_\_\_\_\_

4. Find the LCM of 6, 8, and 60.

4. \_\_\_\_\_

5. Write  $\frac{3}{5}$  as an equivalent expression with a denominator of 30.

5. \_\_\_\_\_

6. Simplify  $\frac{8}{28}$ .

6. \_\_\_\_\_

7. Simplify  $\frac{28}{35}$ .

7. \_\_\_\_\_

Perform the indicated operations and simplify.

8.  $\frac{2}{3} + \frac{1}{4}$

8. \_\_\_\_\_

9.  $\frac{3}{5} \cdot \frac{7}{9}$

9. \_\_\_\_\_

10.  $\frac{2}{5} \div 4\frac{1}{10}$

10. \_\_\_\_\_

11.  $\frac{3}{5} - \frac{1}{4}$

11. \_\_\_\_\_

Perform the indicated operations.

12.  $3 + 0.4 + 2.3$

12. \_\_\_\_\_

13.  $37.5 - 7.25$

13. \_\_\_\_\_

14.  $2.16 \cdot 0.08$

14. \_\_\_\_\_

15.  $0.368 \div 0.16$

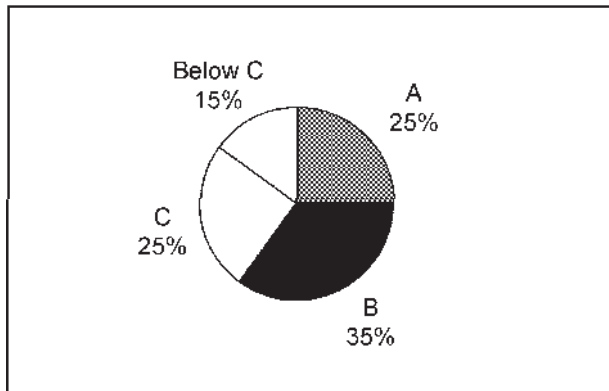
15. \_\_\_\_\_

## Chapter R Test Form A (cont.)

Name: \_\_\_\_\_

16. Round 7.9374 to the nearest hundredth. 16. \_\_\_\_\_
17. Write  $\frac{3}{8}$  as a decimal. 17. \_\_\_\_\_
18. Write  $\frac{7}{9}$  as a repeating decimal. Then approximate the result to the nearest thousandth. 18. \_\_\_\_\_
19. Write 2.35 as a fraction. Do not simplify. 19. \_\_\_\_\_
20. Write 15% as a decimal. 20. \_\_\_\_\_
21. Write 0.37 as a percent. 21. \_\_\_\_\_
22. 15 out of 27 students scored higher than 80 on an algebra test. What percent of students scored higher than 80? Round the answer to the nearest whole percent. 22. \_\_\_\_\_

23. The graph shows students' grades on a final exam for an algebra class.



What percent of the students made a grade of A, B, or C? 23. \_\_\_\_\_

24. Find the area of a triangle with base of 2 centimeters and height of  $\frac{3}{4}$  centimeters. 24. \_\_\_\_\_
25. Find the area of a rectangle with length  $20\frac{1}{2}$  feet and width 16 feet. 25. \_\_\_\_\_

# Chapter R Test Form B

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. Fill in the blank: A natural number greater than 1 whose only factors are 1 and itself is called a \_\_\_\_\_.  
prime number or composite number

1. \_\_\_\_\_

2. List the factors of 36.

2. \_\_\_\_\_

3. Write the prime factorization of 270.

3. \_\_\_\_\_

4. Find the LCM of 6, 8, and 12.

4. \_\_\_\_\_

5. Write  $\frac{5}{6}$  as an equivalent expression with a denominator of 72.

5. \_\_\_\_\_

6. Simplify  $\frac{5}{15}$ .

6. \_\_\_\_\_

7. Simplify  $\frac{8}{52}$ .

7. \_\_\_\_\_

Perform the indicated operations and simplify.

8.  $\frac{2}{3} + \frac{1}{5}$

8. \_\_\_\_\_

9.  $\frac{3}{7} \cdot \frac{5}{12}$

9. \_\_\_\_\_

10.  $\frac{2}{3} \div 3\frac{3}{5}$

10. \_\_\_\_\_

11.  $\frac{4}{5} - \frac{2}{3}$

11. \_\_\_\_\_

Perform the indicated operations.

12.  $36 + 0.21 + 3.5$

12. \_\_\_\_\_

13.  $75.2 - 8.95$

13. \_\_\_\_\_

14.  $2.16 \cdot 3.4$

14. \_\_\_\_\_

15.  $2.34 \div 0.13$

15. \_\_\_\_\_

## Chapter R Test Form B (cont.)

Name: \_\_\_\_\_

16. Round 7.2985 to the nearest hundredth.

16. \_\_\_\_\_

17. Write  $\frac{4}{5}$  as a decimal.

17. \_\_\_\_\_

18. Write  $\frac{5}{6}$  as a repeating decimal. Then approximate the result to the nearest thousandth.

18. \_\_\_\_\_

19. Write 2.28 as a fraction. Do not simplify.

19. \_\_\_\_\_

20. Write 5.2% as a decimal.

20. \_\_\_\_\_

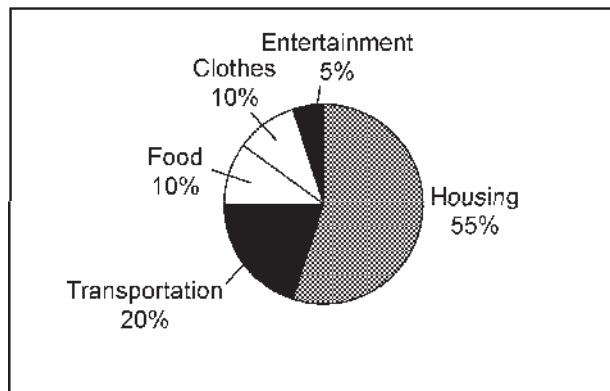
21. Write 0.016 as a percent.

21. \_\_\_\_\_

22. Jillian made 18 out of 24 free throws throughout the basketball season. What percent of the free throws attempts did she make? Round the answer to the nearest whole percent.

22. \_\_\_\_\_

23. The graph shows how a student's income is allocated.



What fraction of the student's income is spent on housing, transportation, and food?

23. \_\_\_\_\_

24. Find the area of a triangle with base of 6 inches and height of  $\frac{11}{3}$  inches.

24. \_\_\_\_\_

25. Find the area of a rectangle with width  $5\frac{1}{4}$  centimeters and length 12 centimeters.

25. \_\_\_\_\_



# Chapter R Test Form C

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. Fill in the blank: The product of a given number and any natural number is called a \_\_\_\_\_.  
factor or multiple

1. \_\_\_\_\_

2. List the factors of 44.

2. \_\_\_\_\_

3. Write the prime factorization of 180.

3. \_\_\_\_\_

4. Find the LCM of 4, 8, and 28.

4. \_\_\_\_\_

5. Write  $\frac{1}{6}$  as an equivalent expression with a denominator of 18.

5. \_\_\_\_\_

6. Simplify  $\frac{15}{75}$ .

6. \_\_\_\_\_

7. Simplify  $\frac{36}{63}$ .

7. \_\_\_\_\_

Perform the indicated operations and simplify.

8.  $\frac{2}{3} + \frac{1}{2}$

8. \_\_\_\_\_

9.  $\frac{3}{5} \cdot \frac{2}{9}$

9. \_\_\_\_\_

10.  $\frac{2}{5} \div 12$

10. \_\_\_\_\_

11.  $\frac{4}{7} - \frac{1}{2}$

11. \_\_\_\_\_

Perform the indicated operations.

12.  $16 + 0.35 + 1.9$

12. \_\_\_\_\_

13.  $38.6 - 4.93$

13. \_\_\_\_\_

14.  $6.2 \cdot 0.013$

14. \_\_\_\_\_

15.  $0.391 \div 0.17$

15. \_\_\_\_\_

## Chapter R Test Form C (cont.)

Name: \_\_\_\_\_

16. Round 17.9583 to the nearest hundredth.

16. \_\_\_\_\_

17. Write  $\frac{5}{16}$  as a decimal.

17. \_\_\_\_\_

18. Write  $\frac{4}{9}$  as a repeating decimal. Then approximate the result to the nearest thousandth.

18. \_\_\_\_\_

19. Write 1.56 as a fraction. Do not simplify.

19. \_\_\_\_\_

20. Write 3.2% as a decimal.

20. \_\_\_\_\_

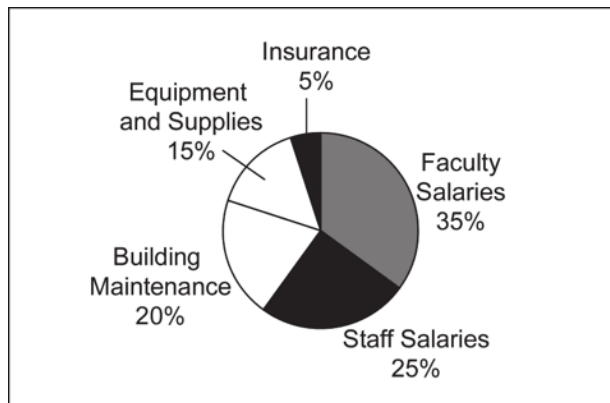
21. Write 0.05 as a percent.

21. \_\_\_\_\_

22. Joel had 6 hits in 15 times at bat. What percent does this represent? Round the answer to the nearest whole percent.

22. \_\_\_\_\_

23. The graph shows how funds are spent at a particular school.



What fraction of the funds are spent on faculty and staff salaries?

23. \_\_\_\_\_

24. Find the area of a triangle with base of 16 centimeters and height of  $\frac{3}{8}$  centimeters.

24. \_\_\_\_\_

25. Find the area of a rectangle with length 16 inches and width  $8\frac{1}{4}$  inches.

25. \_\_\_\_\_

# Chapter R Test Form D

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. Fill in the blank: Fractions that represent the same portion of a whole are called \_\_\_\_\_.  
simplified fractions or equivalent fractions

1. \_\_\_\_\_

2. List the factors of 50.

2. \_\_\_\_\_

3. Write the prime factorization of 126.

3. \_\_\_\_\_

4. Find the LCM of 18, 12, and 36.

4. \_\_\_\_\_

5. Write  $\frac{3}{5}$  as an equivalent expression with a denominator of 20.

5. \_\_\_\_\_

6. Simplify  $\frac{16}{28}$ .

6. \_\_\_\_\_

7. Simplify  $\frac{28}{60}$ .

7. \_\_\_\_\_

Perform the indicated operations and simplify.

8.  $\frac{1}{3} + \frac{2}{5}$

8. \_\_\_\_\_

9.  $\frac{3}{4} \cdot \frac{12}{13}$

9. \_\_\_\_\_

10.  $4\frac{2}{3} \div 6\frac{1}{2}$

10. \_\_\_\_\_

11.  $\frac{3}{8} - \frac{2}{9}$

11. \_\_\_\_\_

Perform the indicated operations.

12.  $36 + 0.25 + 1.7$

12. \_\_\_\_\_

13.  $6.25 - 0.735$

13. \_\_\_\_\_

14.  $2.51 \cdot 0.36$

14. \_\_\_\_\_

15.  $1.058 \div 0.23$

15. \_\_\_\_\_

## Chapter R Test Form D (cont.)

Name: \_\_\_\_\_

16. Round 7.2913 to the nearest hundredth.

16. \_\_\_\_\_

17. Write  $\frac{7}{8}$  as a decimal.

17. \_\_\_\_\_

18. Write  $\frac{1}{3}$  as a repeating decimal. Then approximate the result to the nearest thousandth.

18. \_\_\_\_\_

19. Write 1.35 as a fraction. Do not simplify.

19. \_\_\_\_\_

20. Write 21% as a decimal.

20. \_\_\_\_\_

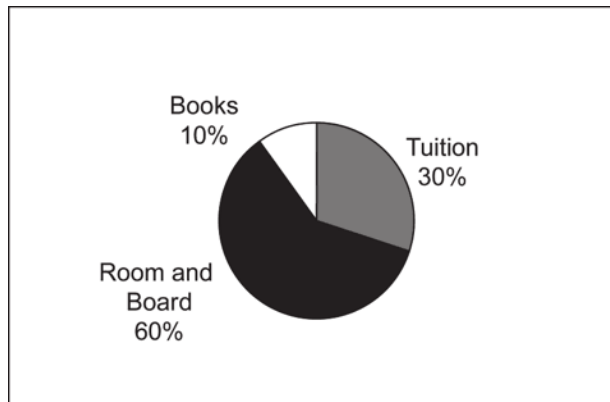
21. Write 0.37 as a percent.

21. \_\_\_\_\_

22. 17 of 56 students drive more than 10 miles to school.  
What percent drive more than 10 miles to school?  
Round the answer to the nearest whole percent.

22. \_\_\_\_\_

23. The graph shows a breakdown of the costs for one semester of college.



What fraction of the cost is for tuition and books?

23. \_\_\_\_\_

24. Find the area of a triangle with base of 16 centimeters and height of 10 centimeters.

24. \_\_\_\_\_

25. Find the area of a rectangle with length  $8\frac{1}{3}$  inches and width 6 inches.

25. \_\_\_\_\_

# Chapter R Test Form E

Name:

Date:

1. To \_\_\_\_\_ means to write as a product.  
(a) simplify                      (b) factor                      (c) multiply                      (d) reduce
2. Give the prime factorization of 420.  
(a)  $2 \cdot 3 \cdot 5 \cdot 7$                       (b)  $2 \cdot 2 \cdot 3 \cdot 5 \cdot 7$                       (c)  $3 \cdot 5 \cdot 5 \cdot 11$                       (d)  $3 \cdot 5 \cdot 11$
3. Find the LCM of 10, 12, and 18.  
(a) 90                      (b) 30                      (c) 180                      (d) 360
4. Which of the following is an expression equivalent to  $\frac{6}{7}$ ?  
(a)  $\frac{18}{21}$                       (b)  $\frac{36}{49}$                       (c)  $\frac{36}{35}$                       (d)  $\frac{8}{9}$
5. Which of the following fractions is the simplified form of  $\frac{42}{48}$ ?  
(a)  $\frac{7}{8}$                       (b)  $\frac{6}{7}$                       (c)  $\frac{5}{6}$                       (d)  $\frac{21}{24}$

Perform the indicated operations and simplify.

6.  $\frac{1}{2} + \frac{7}{16}$   
(a)  $\frac{8}{18}$                       (b)  $\frac{4}{9}$                       (c)  $\frac{7}{32}$                       (d)  $\frac{15}{16}$
7.  $\frac{7}{16} - \frac{1}{3}$   
(a)  $\frac{6}{13}$                       (b)  $\frac{5}{48}$                       (c)  $\frac{1}{8}$                       (d)  $\frac{1}{12}$
8.  $\frac{2}{3} \cdot \frac{6}{19}$   
(a)  $\frac{12}{57}$                       (b)  $\frac{6}{19}$                       (c)  $\frac{4}{19}$                       (d)  $\frac{56}{57}$
9.  $2\frac{2}{5} \div 6\frac{4}{5}$   
(a) 6                      (b)  $\frac{17}{5}$                       (c)  $3\frac{2}{5}$                       (d)  $\frac{6}{17}$

## Chapter R Test Form E (cont.)

Name: \_\_\_\_\_

Perform the indicated operations.

10.  $31 + 0.37 + 4.5$

(a) 7.97

(b) 35.87

(c) 76.37

(d) 31.82

11.  $216.5 - 68.18$

(a) 148.48

(b) 148.42

(c) 148.32

(d) 138.32

12.  $2.35 \cdot 7.8$

(a) 18.33

(b) 183.3

(c) 1833

(d) 1.833

13.  $14.04 \div 0.27$

(a) 5.2

(b) 52

(c) 5.02

(d) 0.52

14. Round 14.6371 to the nearest hundredth.

(a) 14.637

(b) 14.63

(c) 14.64

(d) 15

15. Write  $\frac{3}{8}$  as a decimal.

(a) 3.8

(b) 0.38

(c) 3.75

(d) 0.375

16. Write  $\frac{1}{6}$  as a repeating decimal.

(a)  $1.\overline{6}$

(b)  $0.01\overline{6}$

(c)  $0.1\overline{6}$

(d)  $0.\overline{16}$

17. Write 2.40 as a fraction in lowest terms.

(a)  $\frac{12}{5}$

(b)  $\frac{24}{100}$

(c)  $\frac{6}{25}$

(d)  $\frac{24}{10}$

18. Write 7% as a decimal.

(a) 7

(b) 0.07

(c) 0.7

(d) 0.007

19. Write 0.3 as a percent.

(a) 3%

(b) 0.30%

(c) 300%

(d) 30%

20. A team won 16 games, lost 7 games, and tied 2 games. What percent of the games did they win?

(a) 64%

(b) 8%

(c) 36%

(d) 28%

21. Normal atmospheric pressure is 29.92 inches of mercury. How much above normal is a barometric pressure of 30.39 inches?

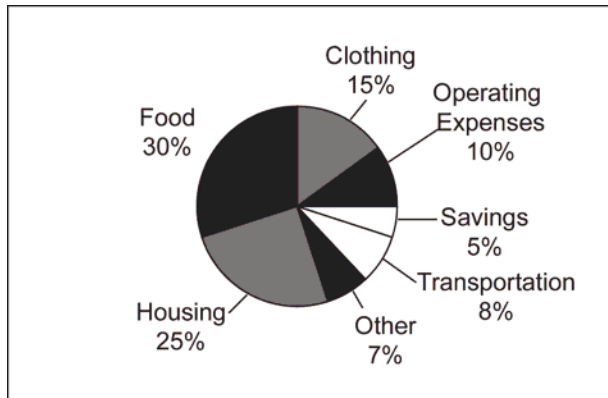
(a) 60.31 inches

(b) 1.47 inches

(c) 0.47 inches

(d) 11.47 inches

The graph represents the budget of a particular family. Use the graph to answer questions 22–23.



22. What fractional part of the budget represents the cost of housing?
- (a)  $\frac{1}{3}$                       (b)  $\frac{1}{5}$                       (c)  $\frac{2}{5}$                       (d)  $\frac{1}{4}$
23. What two expenses account for over half of the budget?
- (a) food and housing                      (b) transportation and clothing  
 (c) food and savings                      (d) housing and transportation
24. Find the area of a triangle with base of 12 feet and height of  $7\frac{1}{4}$  feet.
- (a)  $42\frac{1}{4}$  sq ft                      (b)  $43\frac{1}{2}$  sq ft                      (c)  $42\frac{1}{8}$  sq ft                      (d)  $43\frac{3}{4}$  sq ft
25. Find the area of a rectangle with length of  $10\frac{1}{3}$  inches and width of 6 inches.
- (a) 20 sq in.                      (b) 15 sq in.                      (c) 62 sq in.                      (d) 120 sq in.





# Chapter R Test Form F

Name:

Date:

1. A \_\_\_\_\_ is a natural number greater than 1 that is divisible by a number other than 1 or itself.  
(a) percent (b) prime number  
(c) composite number (d) mixed number
2. Give the prime factorization of 210.  
(a)  $2 \cdot 3 \cdot 5 \cdot 7$  (b)  $2 \cdot 2 \cdot 3 \cdot 5 \cdot 7$  (c)  $3 \cdot 5 \cdot 5 \cdot 11$  (d)  $3 \cdot 5 \cdot 11$
3. Find the LCM of 12, 15, and 21.  
(a) 3 (b) 420 (c) 210 (d) 140
4. Which of the following is an expression equivalent to  $\frac{10}{15}$ ?  
(a)  $\frac{12}{17}$  (b)  $\frac{8}{13}$  (c)  $\frac{100}{225}$  (d)  $\frac{20}{30}$
5. Which of the following fractions is the simplified form of  $\frac{35}{63}$ ?  
(a)  $\frac{70}{126}$  (b)  $\frac{40}{68}$  (c)  $\frac{5}{9}$  (d)  $\frac{7}{9}$

Perform the indicated operations and simplify.

6.  $\frac{1}{3} + \frac{5}{8}$   
(a)  $\frac{6}{11}$  (b)  $\frac{11}{12}$  (c) 1 (d)  $\frac{23}{24}$
7.  $\frac{15}{32} - \frac{3}{8}$   
(a)  $\frac{3}{32}$  (b)  $\frac{12}{26}$  (c)  $\frac{6}{13}$  (d)  $\frac{1}{8}$
8.  $\frac{5}{11} \cdot \frac{33}{35}$   
(a)  $\frac{165}{385}$  (b)  $\frac{3}{8}$  (c)  $\frac{3}{7}$  (d)  $\frac{538}{385}$
9.  $5\frac{3}{7} \div \frac{1}{7}$   
(a)  $5\frac{2}{7}$  (b) 38 (c) 15 (d)  $35\frac{3}{7}$

**Chapter R Test Form F (cont.)**

Name: \_\_\_\_\_

Perform the indicated operations.

**10.**  $47.1 + 6.23 + 1.02$

**(a)** 54.35**(b)** 2121.4**(c)** 63.53**(d)** 11.96

**11.**  $311.2 - 102.9$

**(a)** 211.7**(b)** 209.3**(c)** 208.3**(d)** 218.3

**12.**  $7.49 \cdot 2.5$

**(a)** 187.25**(b)** 17.625**(c)** 176.25**(d)** 18.725

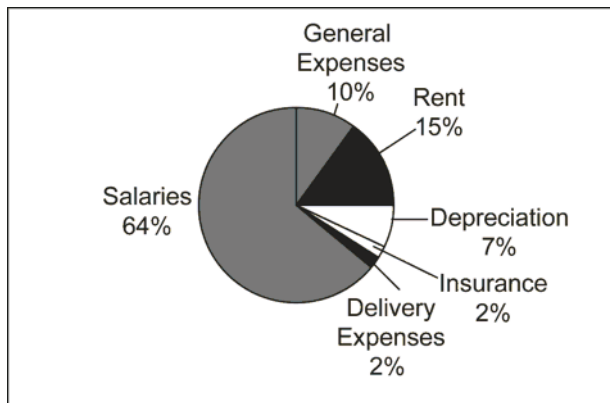
**13.**  $31.488 \div 1.23$

**(a)** 25.6**(b)** 2.56**(c)** 0.256**(d)** 256**14.** Round 267.1307 to the nearest hundredth.**(a)** 270**(b)** 267.13**(c)** 267.131**(d)** 267.14**15.** Write  $\frac{6}{16}$  as a decimal.**(a)** 6.16**(b)** 0.616**(c)** 0.375**(d)** 37.5**16.** Write  $\frac{2}{3}$  as a repeating decimal.**(a)**  $0.\overline{16}$ **(b)**  $0.\overline{67}$ **(c)**  $0.0\overline{6}$ **(d)**  $0.\overline{6}$ **17.** Write 0.24 as a fraction in lowest terms.**(a)**  $\frac{12}{50}$ **(b)**  $\frac{24}{1000}$ **(c)**  $\frac{24}{100}$ **(d)**  $\frac{6}{25}$ **18.** Write 9% as a decimal.**(a)** 0.09**(b)** 0.9**(c)** 0.009**(d)** 9**19.** Write 0.45 as a percent.**(a)** 0.45%**(b)** 4.5%**(c)** 45%**(d)** 450%**20.** A team won 19 games, lost 4 games, and tied 2 games. What percent of the games did they win?**(a)** 16%**(b)** 76%**(c)** 24%**(d)** 8%**21.** Normal atmospheric pressure is 29.92 inches of mercury. How much below normal is a barometric pressure of 28.17 inches?**(a)** 1.75 inches**(b)** 0.75 inches**(c)** 0.85 inches**(d)** 1.85 inches

## Chapter R Test Form F (cont.)

Name: \_\_\_\_\_

The graph represents the annual operating expenses of a particular company in June. Use the graph to answer questions 22–23.



22. What single expense accounts for over half of the budget?  
(a) rent                      (b) salaries                      (c) depreciation                      (d) none
23. General expenses and rent combined make up what fractional part of the budget?  
(a)  $\frac{1}{4}$                       (b)  $\frac{1}{3}$                       (c)  $\frac{1}{5}$                       (d)  $\frac{1}{10}$
24. Find the area of a triangle with base of 16 inches and height of 10 inches.  
(a) 160 sq in.                      (b) 40 sq in.                      (c) 150 sq in.                      (d) 80 sq in.
25. Find the area of a rectangle with length of 8 centimeters and width of 5 centimeters.  
(a) 20 sq cm                      (b) 40 sq cm                      (c) 13 sq cm                      (d) 80 sq cm



# Chapter 1 Pretest Form A

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. Given the set  $\left\{-6, -4, \frac{1}{3}, 0, 2, 6, 11.5, \sqrt{11}, 2\pi\right\}$ , list the numbers that are integers.

1. \_\_\_\_\_

Insert  $<$ ,  $>$ , or  $=$  to form a true statement.

2.  $-4$  \_\_\_\_\_  $0$

2. \_\_\_\_\_

3.  $-2$  \_\_\_\_\_  $-15$

3. \_\_\_\_\_

Find the absolute value.

4.  $|14|$

4. \_\_\_\_\_

5.  $|-2.7|$

5. \_\_\_\_\_

6. Write the following phrase as an algebraic expression.  
Five times the sum of a number and 4

6. \_\_\_\_\_

Evaluate the following.

7.  $(-3)^2$

7. \_\_\_\_\_

8.  $-5^3$

8. \_\_\_\_\_

9. Find the opposite of  $-\frac{5}{12}$ .

9. \_\_\_\_\_

10. Find the reciprocal of  $\frac{6}{7}$ .

10. \_\_\_\_\_

Perform the indicated operations and simplify.

11.  $5 + 7 \cdot 2^2$

11. \_\_\_\_\_

12.  $-8 + 15$

12. \_\_\_\_\_

13.  $-5 - 12$

13. \_\_\_\_\_

## Chapter 1 Pretest Form A (cont.)

Name: \_\_\_\_\_

14.  $(-6)(-8)$  14. \_\_\_\_\_

15.  $-3.5 + 0.02$  15. \_\_\_\_\_

16.  $\frac{-3 - 5^2}{7(-1)}$  16. \_\_\_\_\_

17. Evaluate  $3xy - x^2$  when  $x = -4$  and  $y = -2$ . 17. \_\_\_\_\_

Decide whether the given number is a solution to the equation.

18.  $x - 15 = 8$ ;  $x = 7$  18. \_\_\_\_\_

19.  $\frac{x}{4} + 3 = 8$ ;  $x = 20$  19. \_\_\_\_\_

20. In a series of plays, a football team gains 5 yards, loses 7 yards, and then loses 2 yards. What is their total gain or loss of yardage? 20. \_\_\_\_\_

21. Use the Commutative Property of Addition to rewrite the following statement.  $5y + 4$  21. \_\_\_\_\_

22. Use the Distributive Property to write the expression without parentheses.  $7(2 + 3t)$  22. \_\_\_\_\_

23. Identify the property illustrated by the expression.  
 $6 + (2 + 4) = (6 + 2) + 4$  23. \_\_\_\_\_

Simplify each expression.

24.  $3x - 5 - 2x - 3$  24. \_\_\_\_\_

25.  $-2(x + 1) + 3(2 - 4x)$  25. \_\_\_\_\_

# Chapter 1 Pretest Form B

Name: \_\_\_\_\_

Date: \_\_\_\_\_

1. Given the set  $\left\{-6, -4, \frac{1}{3}, 0, 2, 6, 11.5, \sqrt{11}, 2\pi\right\}$ , list the numbers that are natural numbers.

1. \_\_\_\_\_

Insert  $<$ ,  $>$ , or  $=$  to form a true statement.

2.  $0$  \_\_\_\_\_  $-7$

2. \_\_\_\_\_

3.  $-12$  \_\_\_\_\_  $-3$

3. \_\_\_\_\_

Find the absolute value.

4.  $|12|$

4. \_\_\_\_\_

5.  $|-1.8|$

5. \_\_\_\_\_

6. Write the following phrase as an algebraic expression.  
12 less than 3 times a number

6. \_\_\_\_\_

Evaluate the following.

7.  $2^5$

7. \_\_\_\_\_

8.  $-7^2$

8. \_\_\_\_\_

9. Find the opposite of  $-\frac{7}{8}$ .

9. \_\_\_\_\_

10. Find the reciprocal of  $\frac{4}{9}$ .

10. \_\_\_\_\_

Perform the indicated operations and simplify.

11.  $4 + 6 \cdot 2^2$

11. \_\_\_\_\_

12.  $-6 + (-8)$

12. \_\_\_\_\_

13.  $-3 - (-7)$

13. \_\_\_\_\_

## Chapter 1 Pretest Form B (cont.)

Name: \_\_\_\_\_

14.  $(-7)(6)$  14. \_\_\_\_\_

15.  $-3.5 + 0 - 2$  15. \_\_\_\_\_

16.  $\frac{-4 - 4^2}{2(-5)}$  16. \_\_\_\_\_

17. Evaluate  $5xy - x^2$  when  $x = -5$  and  $y = -2$ . 17. \_\_\_\_\_

Decide whether the given number is a solution to the equation.

18.  $x - 20 = -4$ ;  $x = 16$  18. \_\_\_\_\_

19.  $\frac{x}{5} - 6 = 3$ ;  $x = 15$  19. \_\_\_\_\_

20. A submarine is 150 feet below the sea level when it dives 20 feet and then rises 40 feet. What is its new position? 20. \_\_\_\_\_

21. Use the Commutative Property of Addition to rewrite the following statement.  $7y + 9$  21. \_\_\_\_\_

22. Use the Distributive Property to write the expression without parentheses.  $6(4 + 5t)$  22. \_\_\_\_\_

23. Identify the property illustrated by the expression.  $(x + 0) + 4 = x + 4$  23. \_\_\_\_\_

Simplify each expression.

24.  $3x - 1 - x + 6$  24. \_\_\_\_\_

25.  $4(x - 3) - 2(1 - 3x)$  25. \_\_\_\_\_



# Chapter 1 Test Form A

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Translate each statement into symbols. Let  $x$  represent the unknown number if needed.

1. Negative eight is greater than negative twelve. 1. \_\_\_\_\_
2. Three times a number added to eight is fourteen. 2. \_\_\_\_\_
3. Tell which set or sets of numbers  $-3$  belongs to: natural numbers, whole numbers, integers, rational numbers, irrational numbers, real numbers. 3. \_\_\_\_\_
4. Insert  $<$ ,  $>$ , or  $=$  to make a true statement:  $|-12|$  \_\_\_\_\_  $6$  4. \_\_\_\_\_

Simplify each expression.

5.  $-12 + (-3)$  5. \_\_\_\_\_
6.  $12 - 19$  6. \_\_\_\_\_
7.  $(-6)(-2)$  7. \_\_\_\_\_
8.  $(-1)(-2)(-3)(-4)$  8. \_\_\_\_\_
9.  $-\frac{3}{4} \div \frac{1}{8}$  9. \_\_\_\_\_
10.  $\frac{2^2}{6}$  10. \_\_\_\_\_
11.  $-2 - 3(4 - 6)$  11. \_\_\_\_\_
12.  $\frac{2 + |-6|}{8 - 24}$  12. \_\_\_\_\_
13.  $12 - 2^2 - 8$  13. \_\_\_\_\_
14.  $\frac{-15 + 2 \cdot 5}{2 + 3}$  14. \_\_\_\_\_