## Exploring Microsoft Office 365, Excel 2019 Comprehensive (Poatsy) Chapter 3 Formulas and Functions

1) If you wanted to reference a cell in a formula and you did not want that cell to change when copying and pasting you would use what kind of reference?
A) Fixed
B) Relative
C) Mixed
D) Absolute

Answer: D
Diff: 1
Objective: E2.01 Use Relative, Absolute, and Mixed Cell References in Formulas
2) If a cell containing $=B \$ 14$ is copied and pasted three columns over and two rows down, what would the resultant cell reference become?
A) $E \$ 14$
B) $\$ E \$ 14$
C) B16
D) $\mathrm{B} \$ 16$

Answer: A
Diff: 2
Objective: E2.01 Use Relative, Absolute, and Mixed Cell References in Formulas
3) If the cell reference $\$ \mathrm{~A} 5$ in a formula is copied and pasted over two columns and down two rows from its original cell, what the cell reference become in the new cell?
A) $\$ \mathrm{~A} 5$
B) $\$ \mathrm{~A} 7$
C) $\$ \mathrm{C} 5$
D) $\$ \mathrm{C} 7$

Answer: B
Diff: 2
Objective: E2.01 Use Relative, Absolute, and Mixed Cell References in Formulas
4) What is the default method of referencing cells in formulas?
A) Absolute
B) Relative
C) Mixed
D) Default

Answer: B
Diff: 2
Objective: E2.01 Use Relative, Absolute, and Mixed Cell References in Formulas
5) Which of the following is not a valid logical test?
A) $=>$
B) $<=$
C) <>
D) $>=$

Answer: A
Diff: 2
Objective: E2.07 Use the IF Function
6) Which keyboard shortcut toggles through the types of reference options?
A) F2
B) F3
C) F4
D) F5

Answer: C
Diff: 3
Objective: E2.01 Use Relative, Absolute, and Mixed Cell References in Formulas
7) What type of cell reference should be used when a value remains constant?
A) Absolute
B) Relative
C) Mixed
D) Constant

Answer: A
Diff: 2
Objective: E2.01 Use Relative, Absolute, and Mixed Cell References in Formulas
8) If a cell containing the formula $=\$ B \$ 14$ is not copy and pasted, but moved four columns over and four rows down, what would the resultant cell reference become?
A) $=$ F18
B) $=\$ \mathrm{~F} \$ 18$
C) $=\mathrm{B} 14$
D) $=\$$ B $\$ 14$

Answer: D
Diff: 2
Objective: E2.01 Use Relative, Absolute, and Mixed Cell References in Formulas
9) Which Excel function changes the value to a desired number of decimal places?
A) truncate
B) Round
C) Decrease decimal
D) Increase decimal

Answer: B
Diff: 3
Objective: E2.03 Insert Basic Math and Statistics Functions
10) What describes a function's purpose?
A) Arguments
B) Name
C) Category
D) Variables

Answer: B
Diff: 2
Objective: E2.02 Insert a Function
11) Which of the following is not a category of functions?
A) Logical
B) Financial
C) Statistical
D) Graphing

Answer: D
Diff: 2
Objective: E2.02 Insert a Function
12) What punctuation is used to separate the two cell references in a range?
A) Period (.)
B) Semi-colon (;)
C) Comma (,)
D) Colon (:)

Answer: D
Diff: 1
Objective: E2.02 Insert a Function
13) Functions can be selected by using the $\qquad$ .
A) Add Function dialog box
B) Format Function dialog box
C) Insert Function dialog box
D) Create Function dialog box

Answer: C
Diff: 2
Objective: E2.02 Insert a Function
14) What do you use to separate arguments in a function?
A) Period (.)
B) Semi-colon (;)
C) Comma (,)
D) Colon (:)

Answer: C
Diff: 1
Objective: E2.02 Insert a Function
15) What error will you get if you type a function name incorrectly?
A) \#FUNCTION?
B) \#VALUE?
C) \#ERROR?
D) \#NAME?

Answer: D
Diff: 3
Objective: E2.02 Insert a Function
16) What term refers to the necessity of following the rules when it comes to using functions?
A) syntax
B) formula
C) arguments
D) function logic

Answer: A
Diff: 1
Objective: E2.02 Insert a Function
17) What does Excel use to indicate optional arguments in a function?
A) Square brackets []
B) Parenthesis ()
C) Curly brackets \{\}
D) Quote marks ""

Answer: A
Diff: 2
Objective: E2.02 Insert a Function
18) Which function would you use if you wanted to count the number of values, but ignore cells that have text or are empty?
A) COUNT
B) COUNTA
C) COUNTBLANK
D) COUNTVALUES

Answer: A
Diff: 2
Objective: E2.03 Insert Basic Math and Statistics Functions
19) What two functions compute the central tendency of values?
A) AVERAGE and MODE
B) AVERAGE and MEDIAN
C) MIN and MAX
D) AVERAGE and CENTER

Answer: B
Diff: 2
Objective: E2.03 Insert Basic Math and Statistics Functions
20) Where does Excel automatically display statistics like count, average, and sum when a range of values is selected?
A) Formula bar
B) Name box
C) Status bar
D) Statistics bar

Answer: C
Diff: 2
Objective: E2.03 Insert Basic Math and Statistics Functions
21) The ROUND function requires how many arguments?
A) 2
B) 3
C) 4
D) 1

Answer: A
Diff: 3
Objective: E2.03 Insert Basic Math and Statistics Functions
22) What is the term for the inputs required in a function?
A) formulas
B) syntax
C) arguments
D) terms

Answer: C
Diff: 2
Objective: E2.03 Insert Basic Math and Statistics Functions
23) If you wanted to count the number of entries in a list that contained numbers, text, and blank cells, but ignore the text and blank cells, which function would you use?
A) COUNT
B) COUNTA
C) COUNTBLANK
D) COUNTIF

Answer: A
Diff: 2
Objective: E2.03 Insert Basic Math and Statistics Functions
24) Which status bar statistic can you not enable?
A) SUM
B) MIN
C) Range Name
D) Page Number

Answer: C
Diff: 3
Objective: E2.03 Insert Basic Math and Statistics Functions
25) What action changes the actual number of decimal places Excel stores instead of just changing what is displayed?
A) Decrease decimal setting
B) Increase decimal setting
C) ROUND function
D) DECIMAL function

Answer: C
Diff: 3
Objective: E2.03 Insert Basic Math and Statistics Functions
26) What does the AVERAGE function not ignore?
A) Text
B) Empty cells
C) Dates
D) Cells with N/A

Answer: C
Diff: 3
Objective: E2.03 Insert Basic Math and Statistics Functions
27) What function computes the value in which one-half of the data is above and one-half is below.
A) MIDDLE
B) MODE
C) AVERAGE
D) MEDIAN

Answer: D
Diff: 3
Objective: E2.03 Insert Basic Math and Statistics Functions
28) Which of the following does not comply with the preferred way of using the SUM function?
A) $=\operatorname{SUM}(\mathrm{A} 4: \mathrm{A} 11)$
B) $=\operatorname{SUM}(\mathrm{A} 4: \mathrm{A} 11, \mathrm{~B} 9: \mathrm{E} 11)$
C) $=\operatorname{SUM}(\mathrm{A} 4, \mathrm{~B} 8, \mathrm{D} 14)$
D) $=\operatorname{SUM}(\mathrm{A} 4 / \mathrm{A} 11)$

Answer: D
Diff: 2
Objective: E2.03 Insert Basic Math and Statistics Functions
29) What will you see if you enter the TODAY function without the parenthesis?
A) \#VALUE?
B) Nothing. It will fill in the parenthesis for you.
C) \#FUNCTION?
D) \#NAME?

Answer: D
Diff: 3
Objective: E2.04 Use Date Functions
30) Which function would you use to find the oldest date in a range?
A) MIN
B) MAX
C) OLDEST
D) MEDIAN

Answer: A
Diff: 1
Objective: E2.04 Use Date Functions
31) Which of the following will not return the system clock's date?
A) NOW ()
B) TODAY()
C) Ctrl+;
D) DATE()

Answer: D
Diff: 3
Objective: E2.04 Use Date Functions
32) What keyboard shortcut will automatically update any formulas using $=T O D A Y()$ or $=\mathrm{NOW}()$ ?
A) F8
B) F9
C) F 10
D) F11

Answer: B
Diff: 3
Objective: E2.04 Use Date Functions
33) Which of the following is not a valid test in an =IF statement?
A) A4-B4
B) $\mathrm{A} 4<\mathrm{b} 4$
C) $\mathrm{A} 4>\mathrm{A} 4$
D) $\mathrm{B} 4<=\mathrm{B} 4$

Answer: A
Diff: 1
Objective: E2.07 Use the IF Function
34) If A7=21, which of the following =IF statements would produce the result of "Much Greater"?
A) $=\operatorname{IF}(\mathrm{A} 7>14$, "Greater", IF (A7>20,"Much Greater","Not Greater than 20"))

C) $=\operatorname{IF}(\mathrm{A} 7<14$, "Greater", $\operatorname{IF}(\mathrm{A} 7>20$, "Much Greater","Not Greater than 20"))
D) $=\operatorname{IF}(A 7<14$, "Greater",IF(A7>20,"Much Greater","Not Greater than 20")

Answer: C
Diff: 3
Objective: E2.07 Use the IF Function
35) Which of the following is not an argument associated with the IF function?
A) Test
B) Value if true
C) Value if false
D) Value if neither true nor false

Answer: D
Diff: 2
Objective: E2.07 Use the IF Function
36) Which of the following is not a valid =IF statement?
A) $=\operatorname{IF}(A 5>19$,"Greater","Not Greater")
B) $=\mathrm{IF}(\mathrm{A} 5>19, \mathrm{~b} 7, \mathrm{~b} 9)$
C) $=I F(A 5>19,1,9)$
D) $=\mathrm{IF}(\mathrm{A} 5>19$, Greater,Not Greater)

Answer: D
Diff: 2
Objective: E2.07 Use the IF Function
37) Which of the following is not a valid lookup function?
A) HLOOKUP
B) VLOOKUP
C) LLOOKUP
D) LOOKUP

Answer: C
Diff: 2
Objective: E2.05 Use Lookup Functions
38) To look up an exact match, what should you enter in the range_lookup argument?
A) FALSE
B) TRUE
C) EXACT
D) Leave it blank

Answer: A
Diff: 3
Objective: E2.05 Use Lookup Functions
39) Which of the following would not produce the correct monthly payment on a loan of $\$ 13,000$ which will be paid off in 5 years with an annual interest rate of $6 \%$ ?
A) $=\operatorname{PMT}(6 \%, 60,-13000)$
B) $=$ PMT $(.5 \%, 60,-13000)$
C) $=\operatorname{PMT}(.5 \%, 5 * 12,-13000)$
D) $=\operatorname{PMT}(6 \% / 12,60,-13000)$

Answer: A
Diff: 2
Objective: E2.06 Use the PMT Function
40) If you will never copy and paste a formula you do not have to be concerned about absolute, relative, or mixed references.
Answer: TRUE
Diff: 2
Objective: E2.01 Use Relative, Absolute, and Mixed Cell References in Formulas
41) In a mixed reference you can put the dollar sign (\$) in front of the column or row indicator. Answer: TRUE
Diff: 2
Objective: E2.01 Use Relative, Absolute, and Mixed Cell References in Formulas
42) A good practice when entering function names is to type them in lowercase and see if Excel converts them to upper case.
Answer: TRUE
Diff: 3
Objective: E2.02 Insert a Function
43) When entering functions, the square brackets, [], indicate required values.

Answer: FALSE
Diff: 2
Objective: E2.03 Insert Basic Math and Statistics Functions
44) The COUNTBLANK function will count cells that contain formulas that compute to a value of zero (0).
Answer: FALSE
Diff: 2
Objective: E2.03 Insert Basic Math and Statistics Functions
45) This is a valid way to use the MAX function: $=\operatorname{MAX}(a 4: d 11, \mathrm{f} 1: \mathrm{f} 2)$

Answer: TRUE
Diff: 3
Objective: E2.03 Insert Basic Math and Statistics Functions
46) The COUNTA function only counts text entries. It does not count calculable values or blank cells.
Answer: FALSE
Diff: 2
Objective: E2.03 Insert Basic Math and Statistics Functions
47) Excel assigns date number 1 to January 1, 1900.

Answer: TRUE
Diff: 2
Objective: E2.04 Use Date Functions
48) All IF functions have three arguments.

Answer: TRUE
Diff: 1
Objective: E2.07 Use the IF Function
49) You could use both $\mathrm{A} 3>\mathrm{b} 9$ or $\mathrm{B} 9<\mathrm{A} 3$ as the test in an IF function and get the same results. You would just switch the second and third arguments.
Answer: TRUE
Diff: 3
Objective: E2.07 Use the IF Function
50) There are rare occasions when both the second and third argument of an IF function are executed.
Answer: FALSE
Diff: 1
Objective: E2.07 Use the IF Function
51) The most used logical function is the IF function.

Answer: TRUE
Diff: 1
Objective: E2.07 Use the IF Function
52) The test in an IF function must evaluate to either a True or a False.

Answer: TRUE
Diff: 1
Objective: E2.07 Use the IF Function
53) The VLOOKUP function has four required arguments.

Answer: FALSE
Diff: 3
Objective: E2.05 Use Lookup Functions
54) It is very important to sort the first column in a table lookup array in descending order.

Answer: FALSE
Diff: 2
Objective: E2.05 Use Lookup Functions
55) If you omit the fourth argument in a VLOOKUP function, Excel will assume you intend the fourth argument to be False.
Answer: FALSE
Diff: 3
Objective: E2.05 Use Lookup Functions
56) If you are looking up exact values in a lookup table then it does not matter how the table is sorted.
Answer: TRUE
Diff: 2
Objective: E2.05 Use Lookup Functions
57) In the HLOOKUP function, the third argument is the column index number.

Answer: FALSE
Diff: 3
Objective: E2.05 Use Lookup Functions
58) A lookup table should contain at least two rows and two columns, not counting headings.

Answer: TRUE
Diff: 2
Objective: E2.05 Use Lookup Functions
59) The HLOOKUP function can only be used to find exact matches.

Answer: FALSE
Diff: 3
Objective: E2.05 Use Lookup Functions
60) The PMT function uses three required arguments and no optional arguments.

Answer: FALSE
Diff: 3
Objective: E2.06 Use the PMT Function
61) The default calculation using the PMT function will produce a negative number.

Answer: TRUE
Diff: 2
Objective: E2.06 Use the PMT Function
62) FV is a required argument in the PMT function.

Answer: FALSE
Diff: 3
Objective: E2.06 Use the PMT Function
63) The two optional arguments in the PMT function allows the function to be used with variable loans.
Answer: FALSE
Diff: 3
Objective: E2.06 Use the PMT Function
64) Functions can be nested inside the arguments in the various lookup functions.

Answer: TRUE
Diff: 3
Objective: E2.06 Use the PMT Function
65) $\qquad$ references change when formulas are copy and pasted.
Answer: Relative, Mixed
Diff: 2
Objective: E2.01 Use Relative, Absolute, and Mixed Cell References in Formulas
66) The inputs in a function are specified by its $\qquad$ .
Answer: arguments
Diff: 3
Objective: E2.02 Insert a Function
67) A function's $\qquad$ defines the rules by which the function operates.
Answer: syntax
Diff: 3
Objective: E2.02 Insert a Function
68) Using ___ simplifies adding complex mathematical formulas to a cell.

Answer: functions, a function
Diff: 1
Objective: E2.02 Insert a Function
69) The $\qquad$ feature in Excel displays various options when you type an equal (=) sign and then begin typing a function name.
Answer: Formula AutoComplete, Formula Auto Complete
Diff: 3
Objective: E2.02 Insert a Function
70) $\qquad$ tool is a set of analytical tools that appears when you select a range.
Answer: Quick Analysis
Diff: 3
Objective: E2.03 Insert Basic Math and Statistics Functions
71) The $\qquad$ function finds the smallest value in a range.
Answer: MIN
Diff: 1
Objective: E2.03 Insert Basic Math and Statistics Functions
72) It is called $a(n)$ $\qquad$ function when a function is used inside of another function.
Answer: nested
Diff: 2
Objective: E2.03 Insert Basic Math and Statistics Functions
73) The $\qquad$ function counts the number of calculable values, but ignores cells that have text or are empty.
Answer: COUNT
Diff: 2
Objective: E2.03 Insert Basic Math and Statistics Functions
74) The $\qquad$ function finds the largest value in a range.
Answer: MAX
Diff: 2
Objective: E2.03 Insert Basic Math and Statistics Functions
75) When working with dates, Excel actually assigns $\qquad$ numbers to each date.
Answer: serial
Diff: 3
Objective: E2.04 Use Date Functions
76) In military time, $15: 00$ is $\qquad$ in non-military time.
Answer: 3:00 PM, 3 PM, 3 P.M.
Diff: 2
Objective: E2.04 Use Date Functions
77) The TODAY() and NOW() functions are updated every time you open or $\qquad$ the spreadsheet.
Answer: print
Diff: 2
Objective: E2.04 Use Date Functions
78) The $\qquad$ function is similar to the TODAY() function, except that it also returns the system time.
Answer: $\quad$ NOW ( $)$, $=\mathrm{NOW}($ )
Diff: 3
Objective: E2.04 Use Date Functions
79) The MIN and MAX functions can be used with $\qquad$ as well as numbers.
Answer: dates, variables, arguments, expressions
Diff: 3
Objective: E2.04 Use Date Functions
80) The test argument in an IF statement must evaluate to either $\qquad$ .
Answer: true or false, false or true
Diff: 1
Objective: E2.07 Use the IF Function
81) The $\qquad$ function actually changes the number of decimal places in the value.
Answer: Round
Diff: 2
Objective: E2.03 Insert Basic Math and Statistics Functions
82) When you use the VLOOKUP function, the $\qquad$ column in the array is used to look up the value.
Answer: left, first
Diff: 3
Objective: E2.05 Use Lookup Functions
83) The range that contains the lookup table is called the $\qquad$ .

Answer: table array
Diff: 3
Objective: E2.05 Use Lookup Functions
84) In a lookup table, the number of the column which contains the return values is called the
$\qquad$ _.
Answer: column index number
Diff: 3
Objective: E2.05 Use Lookup Functions
85) The $\qquad$ is the lowest value for a category in the table lookup table.
Answer: breakpoint, break point
Diff: 3
Objective: E2.05 Use Lookup Functions
86) If the annual interest rate is $12 \%$ and payments are made monthly, then you would enter .01 in the $\qquad$ argument in the PMT function.
Answer: Rate
Diff: 3
Objective: E2.06 Use the PMT Function
87) In the PMT function, the PV argument refers to the $\qquad$ of the loan.
Answer: present value
Diff: 2
Objective: E2.06 Use the PMT Function
88) If you will be paying monthly for six years to pay off a car, then you would enter $\qquad$ in the NPER argument in the PMT function.
Answer: 6*12,72
Diff: 3
Objective: E2.06 Use the PMT Function
89) Match the following terms with their description:
I. Absolute cell references
II. Relative cell references
III. Mixed cell references
IV. Argument
V. Function
A. Part of it changes when you copy and paste a formula
B. Changes when you copy and paste a formula
C. Simplifies complex calculations
D. Does not change when you copy and paste a formula
E. Required input in a function

Answer: D, B, A, E, C
Diff: 1
Objective: Multiple Objectives
90) Match the following terms with their description:
I. Median
II. Average
III. Sum
IV. Table array
V. Breakpoint
A. Total
B. Lowest value in a series
C. Midpoint value
D. Range used for looking up values
E. Arithmetic mean

Answer: C, E, A, D, B
Diff: 2
Objective: Multiple Objectives
91) Match the following terms with their description:
I. NOW()
II. TODAY()
III. PV
IV. RATE
V. PMT
A. Current amount of a loan
B. Helps figure out how much a loan will cost each month
C. A good example is interest
D. Returns the system date
E. Returns the system date and time

Answer: E, D, A, C, B
Diff: 2
Objective: Multiple Objectives
92) Match the following terms with their description:
I. COUNT
II. COUNTA
III. COUNTBLANK
IV. IF
V. NPER
A. Only uses calculable values
B. Evaluates true and false statements
C. Includes text, but not blank cells
D. Length of time you will be paying on a loan
E. Only includes empty cells

Answer: A, C, E, B, D
Diff: 2
Objective: Multiple Objectives
93) Match the following terms with their description:
I. Formula AutoComplete
II. Quick Analysis
III. Function ScreenTip
IV. Logical test
V. Syntax
A. Can be used to apply formatting and insert basic functions
B. Pop-up description
C. A set of rules
D. Matches letters as you type
E. Evaluates to True or False

Answer: D, A, B, E, C
Diff: 2
Objective: Multiple Objectives
94) Match the example with the function or feature:
I. =A54
II. =\$A54
III. $=\$ \mathrm{~A} \$ 54$
IV. $=$ SUM(A54:B97)
V. "Ohio"
A. Function
B. Relative reference
C. Ensures text entry
D. Mixed reference
E. Absolute reference

Answer: B, D, E, A, C
Diff: 1
Objective: Multiple Objectives
95) Match the example by replacing the ??? with the proper function:
I. =???(B7>9,"Bigger","Smaller")
II. $=$ ??? $(12 \% / 12,360,-120000)$
III. $=$ ???(A4,B4:F9,2)
IV. $=$ ???(B9:E21)
V. =???()
A. NOW
B. PMT
C. VLOOKUP
D. IF
E. SUM

Answer: D, B, C, E, A
Diff: 3
Objective: Multiple Objectives
96) Match the following terms with their description:
I. VLOOKUP
II. HLOOKUP
III. Lookup table
IV. Lookup value
V. Column index number
A. Data is organized in rows
B. Column that contains the return values
C. Cell that contains the value to be looked up
D. Has the data used with HLOOKUP or VLOOKUP
E. Data is organized in columns

Answer: E, A, D, C, B
Diff: 2
Objective: E2.05 Use Lookup Functions

