MULTIPLE CHOICE

1. A _____ is a prewritten formula that is built into Excel.
   a. function           c. task
   b. feature           d. calculation

   ANS: A  PTS:  1  REF:  EX 66

2. To start a new line in a cell, press the _____ keys.
   a. CTRL+ENTER   c. ALT+ENTER
   b. TAB+ENTER   d. SHIFT+ENTER

   ANS: C  PTS:  1  REF:  EX 71

3. When you enter a two-digit year that is less than 30, Excel changes the year to _____.
   a. 20xx           c. 18xx
   b. 30xx           d. 19xx

   ANS: A  PTS:  1  REF:  EX 72

4. All of the following are valid Excel arithmetic operators except _____.
   a. ^
   b. *
   c. %
   d. >

   ANS: D  PTS:  1  REF:  EX 76

5. Which of the following calculations multiplies 23 by 0.01?
   a. =23%
   b. =23
   c. =23+.01
   d. =24-.01

   ANS: A  PTS:  1  REF:  EX 76

6. When more than one arithmetic operator is involved in a formula, Excel follows the same basic order of _____ that you use in algebra.
   a. placement
   b. operations
   c. positioning
   d. selections

   ANS: B  PTS:  1  REF:  EX 77

7. When Excel follows the order of operations, the formula, 8 * 3 + 2, equals _____.
   a. 40
   b. 26
   c. 48
   d. 13

   ANS: B  PTS:  1  REF:  EX 77
8. Which of the following happens when you enter the formula =G15 into a cell?
   a. Excel recalculates all formulas in the worksheet
   b. Excel assigns the sum of the values in the previous 15 cells to the active cell
   c. Excel assigns the value in cell G15 to the active cell
   d. Nothing; =G15 is an invalid formula
   
   ANS: C    PTS: 1    REF: EX 77

9. Point mode allows you to _____, as shown in the accompanying figure.
   a. select cells for use in a formula using the keyboard
   b. select a function from the Sum button list
   c. select cells for use in a formula using the mouse pointer
   d. edit cell contents directly in the cell

   ANS: C    PTS: 1    REF: EX 77-EX 78

10. The adjusted cell references in a copied and pasted formula are called _____ references.
    a. related
    b. relative
    c. pasted
    d. alternative

    ANS: B    PTS: 1    REF: EX 81

11. Which of the following is the path to the Copy and Paste buttons?
    a. (Home tab | Copy group)
    b. (Home tab | Paste group)
    c. (Home tab | Clipboard group)
    d. (Home tab | Formulas group)

    ANS: C    PTS: 1    REF: EX 81
12. You can click the _____ button to undo an automatic correction.
   a. Auto Fill Options
c. Paste Options
   b. AutoCorrect Options
d. Trace Error

   ANS: B  PTS: 1  REF: EX 82

13. Which of the following Option buttons gives options for filling cells following a fill operation?
   a. Auto Fill Options
c. Insert Options
   b. AutoCorrect Options
d. Paste Options

   ANS: A  PTS: 1  REF: EX 82

14. The _____ Options button lists error-checking options following the assignment of an invalid formula to a cell.
   a. Find Error
c. Fix Error
   b. Explain Error
d. Trace Error

   ANS: D  PTS: 1  REF: EX 82

15. You can select a range using the keyboard by pressing the _____ key and then an ARROW key.
   a. F2
c. F6
   b. F4
d. F8

   ANS: D  PTS: 1  REF: EX 82

16. The _____ Option button lists formatting options following an insertion of cells, rows, or columns.
   a. AutoCorrect
c. Auto Fill
   b. Insert
d. Paste

   ANS: B  PTS: 1  REF: EX 82

17. A _____ cell in Excel has a numerical value of zero.
   a. blank
c. copied
   b. formatted
d. filled

   ANS: A  PTS: 1  REF: EX 83

18. The _____ function sums the numbers in the specified range and then divides the sum by the number of cells with numeric values in the range.
   a. MIN
c. AVERAGE
   b. SUM
d. MAX

   ANS: C  PTS: 1  REF: EX 84

19. The _____ AutoComplete list contains those functions that alphabetically match the letters you type following the equal sign.
   a. Function
c. Equal
   b. Formula
d. Calculate

   ANS: B  PTS: 1  REF: EX 84
20. Excel automatically appends the _____ to complete the AVERAGE function when you click the Enter box or press the ENTER key.
   a. left parenthesis    c. right parenthesis
   b. right bracket      d. left bracket
   ANS: C       PTS: 1       REF: EX 85

21. Which of the following is the path to the Sum button?
   a. (Editing tab | Home group) c. (Home tab | Clipboard group)
   b. (Home tab | Editing group) d. (Calculation tab | Editing group)
   ANS: B       PTS: 1       REF: EX 85

22. You should _____ a function name in the Formula AutoComplete list to select the function.
   a. double-click c. right-click
   b. click d. none of the above
   ANS: A       PTS: 1       REF: EX 85

23. The _____ function displays the highest value in a range.
   a. MIN c. MAX
   b. SUM d. AVERAGE
   ANS: C       PTS: 1       REF: EX 86
24. Clicking the _____ opens the Insert Function dialog box shown in the accompanying figure.
   a. Insert Function box on the formula bar  
   b. Function dialog box launcher (Home tab | Calculations group)  
   c. Function button (Home tab | Function group)  
   d. Functions & Formulas button on the status bar  
   
   ANS: A  
   PTS: 1  
   REF: EX 86

25. The _____ function determines the lowest number in a range.
   a. MAX  
   b. AVERAGE  
   c. SUM  
   d. MIN  
   
   ANS: D  
   PTS: 1  
   REF: EX 87

26. To copy cell contents, you can select the cell and then press the _____ keys.
   a. CTRL+V  
   b. CTRL+X  
   c. CTRL+B  
   d. CTRL+C  
   
   ANS: D  
   PTS: 1  
   REF: EX 90

27. To paste copied cell contents, you can press the _____ keys.
   a. CTRL+C  
   b. CTRL+P  
   c. CTRL+V  
   d. CTRL+X  
   
   ANS: C  
   PTS: 1  
   REF: EX 90
28. You can use the _____ to check which cells are referenced in the formula assigned to the active cell.
   a. Formula Finder   c. Calculation Finder
   b. Range Finder     d. Function Finder
   ANS: B     PTS: 1     REF: EX 91

29. A ____ is a predefined set of colors, fonts, chart styles, cell styles, and fill effects.
   a. scheme          c. theme
   b. gallery         d. style
   ANS: C     PTS: 1     REF: EX 93

30. You can open the Format Cells dialog box by pressing the _____ keys.
   a. SHIFT+TAB       c. ALT+1
   b. CTRL+1          d. SHIFT+F1
   ANS: B     PTS: 1     REF: EX 97

31. The most popular background color is _____.
   a. blue            c. red
   b. white           d. yellow
   ANS: A     PTS: 1     REF: EX 98

32. The _____ displays numbers with a fixed dollar sign to the left of the number, a comma every three positions to the left of the decimal point, and displays numbers to the nearest cent.
   a. Comma style format   c. Percent style format
   b. Accounting number format d. Currency style format
   ANS: B     PTS: 1     REF: EX 100
33. In the accompanying figure, the ranges E4:I4 and F13:I13 are formatted with a _____ dollar sign.
   a. fixed               b. formatted  
   c. floating           d. none of the above

   ANS: A       PTS: 1       REF: EX 100

34. Which of the following is the path to the Comma Style button?
   a. (Home tab I Alignment group)  
   b. (Home tab I Font group)      
   c. (Home tab I Cells group)     
   d. (Home tab I Number group)

   ANS: D       PTS: 1       REF: EX 101

35. Which of the following is the path to the Conditional Formatting button?
   a. (Home tab I Editing group)  
   b. (Styles tab I Formatting group)  
   c. (Formatting tab I Styles group)  
   d. (Home tab I Styles group)

   ANS: D       PTS: 1       REF: EX 104

36. If you do not assign a format to a cell or cells in a column, the column width will remain _____ characters.
   a. 8.43  
   b. 7.52  
   c. 11.65  
   d. 9.43

   ANS: A       PTS: 1       REF: EX 107
37. When you decrease the row height to _____, the row is hidden.
   a. 0           c. 2
   b. 1           d. 3
   ANS: A        PTS: 1        REF: EX 111

38. Which of the following is the path to the Spelling button?
   a. (Home tab | Proofing group)           c. (Review tab | Proofing group)
   b. (Proofing tab | Spelling group)       d. (Review tab | Checking group)
   ANS: C        PTS: 1        REF: EX 112

39. _____ view allows you to create or modify a worksheet while viewing how it will look in printed format.
   a. Normal
   b. Page Layout
   c. Page Break Preview
   d. Full Screen
   ANS: B        PTS: 1        REF: EX 114

40. To print a range of cells in the active worksheet, click _____ in the Settings area in the Print gallery, as shown in the accompanying figure.
   a. Print Active Sheets
   b. Print Selection
   c. Print Entire Workbook
   d. none of the above
   ANS: B        PTS: 1        REF: EX 118
MULTIPLE RESPONSE

**Modified Multiple Choice**

1. Which of the following are considered guidelines to use when making decisions about creating a new workbook?
   a. Determine the necessary formulas and functions needed
   b. Identify how to format various elements of the worksheet
   c. Specify how the hard copy of the worksheet should appear
   d. Enter data into the worksheets and format the cells

   **ANS:** A, B, C  **PTS:** 1  **REF:** EX 69

2. Which of the following is true of a function?
   a. Takes a value or values
   b. Performs a calculation
   c. Returns a result to the cell
   d. Contains arguments

   **ANS:** A, B, C, D  **PTS:** 1  **REF:** EX 75

3. Which of the following are valid formulas?
   a. =3^4
   b. =H3/H11
   c. =11+9
   d. =22-F15

   **ANS:** A, B, C, D  **PTS:** 1  **REF:** EX 76

4. Which of the following actions are provided by the Paste Options button?
   a. Pastes an exact copy of what you copied including contents and formatting
   b. Pastes synonyms or acronyms
   c. Pastes just formulas
   d. Pastes just formatting

   **ANS:** A, C, D  **PTS:** 1  **REF:** EX 82

5. Using the Excel spell checker, you can ______.
   a. check the spelling in a single cell
   b. check the spelling of words in a selected range
   c. add words to the dictionary
   d. add words to the AutoCorrect list

   **ANS:** A, B, C, D  **PTS:** 1  **REF:** EX 113

TRUE/FALSE

1. The equal sign (=) precedes a formula.

   **ANS:** T  **PTS:** 1  **REF:** EX 75

2. An asterisk (*) following a cell reference in a formula is the arithmetic operator that directs Excel to perform the division operation.

   **ANS:** F  **PTS:** 1  **REF:** EX 75
3. Pressing the F9 key instructs Excel to recalculate all formulas.

   ANS: T       PTS: 1       REF: EX 75

4. The arithmetic operator, ^, directs Excel to perform the division operation.

   ANS: F       PTS: 1       REF: EX 76

5. Point mode allows you to select cells for use in a formula by using the keyboard.

   ANS: F       PTS: 1       REF: EX 77

6. As in algebra, you can use brackets to override the order of operations Excel follows to perform formula calculations.

   ANS: F       PTS: 1       REF: EX 77

7. Moving from left to right, the first calculation in the order of operations is negation (-).

   ANS: T       PTS: 1       REF: EX 77

8. Using Point mode to enter formulas often is faster and more accurate than using the keyboard to type the entire formula.

   ANS: T       PTS: 1       REF: EX 79

9. The Insert Options button lists formatting options.

   ANS: T       PTS: 1       REF: EX 82

10. You can use the arrow keys to complete an entry in Point mode.

   ANS: F       PTS: 1       REF: EX 85
11. Clicking the Insert Function box opens the Function Arguments dialog box, as shown in the accompanying figure.

ANS: F  PTS: 1  REF: EX 86

12. The Sum button menu allows you to enter one of five often-used functions easily into a cell.

ANS: T  PTS: 1  REF: EX 87

13. Excel attempts to guess which cells you want to include in the function by looking for ranges that are adjacent to the selected cell and that contain numeric data.

ANS: T  PTS: 1  REF: EX 88

14. Excel has more than 400 additional functions that perform just about every type of calculation you can imagine.

ANS: T  PTS: 1  REF: EX 89

15. To use Range Finder to verify that a formula contains the intended cell references, click the cell with the formula you want to check.

ANS: F  PTS: 1  REF: EX 91
16. The use of a fill color in a cell or range of cells sets off the cell or range from other portions of the worksheet and provides visual impact to draw the user’s eye toward the cell or range.

ANS: T
PTS: 1
REF: EX 93

17. Dates that include years both before and after the year 2000 should be formatted with a two-digit year.

ANS: F
PTS: 1
REF: EX 93

18. When you click the Decrease Font Size button, Excel assigns the next highest font size in the Font Size gallery.

ANS: F
PTS: 1
REF: EX 96

19. You can click the Format Cells Dialog Box Launcher to open the Format Cells dialog box.

ANS: T
PTS: 1
REF: EX 97

20. You cannot format an entire column at once.

ANS: F
PTS: 1
REF: EX 99

21. A floating dollar sign appears immediately to the left of the first digit in a dollar value with no spaces.

ANS: T
PTS: 1
REF: EX 100

22. You can choose a category in the Number tab in the Format Cells dialog box and then select the number of decimal places, whether or not a dollar sign should be displayed, and how negative numbers should appear.

ANS: T
PTS: 1
REF: EX 102

23. The Percent Style button instructs Excel to display a value as a percentage, determined by multiplying the cell entry by 100, rounding the result to the nearest percent, and adding a percent sign.

ANS: T
PTS: 1
REF: EX 103

24. Formatting that appears only when the value in a cell meets conditions that you specify is called conditional formatting.

ANS: T
PTS: 1
REF: EX 104

25. Best fit means that the width of the column will be increased or decreased by a percentage you specify.

ANS: F
PTS: 1
REF: EX 107
COMPLETION

1. Worksheet _________________________ typically contain items analogous to items in a list.

   ANS: rows
   PTS: 1
   REF: EX 69

2. The function, or _________________________, of a worksheet is to provide a user with direct ways to accomplish tasks.

   ANS: purpose
   PTS: 1
   REF: EX 69

3. When Excel recognizes that you entered a date in mm/dd/yy format, it automatically formats the date as _________________________.

   ANS: mm/dd/yyyy
   PTS: 1
   REF: EX 72

4. If you have a long text entry, such as a paragraph, you can instruct Excel to _________________________ text in the cell.

   ANS: wrap
   PTS: 1
   REF: EX 72

5. One of the reasons Excel is such a valuable tool is that you can assign a(n) _________________________ to a cell, and Excel will calculate the result.

   ANS: formula
   PTS: 1
   REF: EX 74

6. A formula in a cell that contains a reference back to itself is called a(n) _________________________.

   ANS: circular reference
   PTS: 1
   REF: EX 75

7. The / arithmetic operator indicates _________________________.

   ANS: division
   PTS: 1
   REF: EX 76
8. In the order of operations, the last operation Excel performs is _________________________.

   ANS: subtraction
   addition

   PTS: 1         REF: EX 77

9. Typing =av in a cell displays the _________________________.

   ANS: Formula AutoComplete list

   PTS: 1         REF: EX 84

10. You can learn more about Excel’s functions with options in the _________________________.

    ANS: Insert Function

    PTS: 1         REF: EX 89

11. You can press the _________________________.

    ANS: ESC

    PTS: 1         REF: EX 91

12. A(n) _________________________ is a dot on the screen that contains a color.

    ANS: pixel

    PTS: 1         REF: EX 107

13. _________________________ means that the width of a column will be increased or decreased so the
    widest entry will fit in the column.

    ANS: Best fit

    PTS: 1         REF: EX 107

14. _________________________ is a technique that can be used to conceal data that might not be
    relevant to a particular report or sensitive data that others should not see.

    ANS: Hiding cells

    PTS: 1         REF: EX 108
15. To set row height to best fit, _________________________ the bottom boundary of the row heading.

ANS: double-click

PTS: 1 REF: EX 111

16. Excel includes a(n) _________________________ you can use to check a worksheet for spelling errors.

ANS: spell checker

PTS: 1 REF: EX 112

17. Always take time to check the _________________________ of a worksheet before submitting it to your supervisor.

ANS: formulas

PTS: 1 REF: EX 113

18. You can click the Page Layout view button on the _________________________ to switch to Page Layout view.

ANS: status bar

PTS: 1 REF: EX 114

19. _________________________ are those portions of a printed page outside the main body of the printed document and always are blank when printed.

ANS: Margins

PTS: 1 REF: EX 114

20. _________________________ view shows the worksheet divided into pages.

ANS: Page Layout

PTS: 1 REF: EX 114

MODIFIED TRUE/FALSE

1. In designing a worksheet, visual aesthetics should come first.

_________________________

ANS: F, functional considerations

PTS: 1 REF: EX 69 TOP: Critical Thinking
2. The values that you use with a function are called **arguments**.

   ANS: T    PTS: 1    REF: EX 75
   TOP: Critical Thinking

3. Statistical functions ignore **blank** cells.

   ANS: T    PTS: 1    REF: EX 84
   TOP: Critical Thinking

4. When cell entries are short, **right-aligning** the entries within their respective columns improves the appearance of the worksheet.

   ANS: F, centering
   PTS: 1    REF: EX 93    TOP: Critical Thinking

5. The Accounting number format assigns a **floating** dollar sign.

   ANS: F, fixed
   PTS: 1    REF: EX 100    TOP: Critical Thinking

**MATCHING**

Identify the letter of the choice that best matches the phrase or definition.

- a. ALT+ENTER
- b. #REF!
- c. F9
- d. F8
- e. CTRL+C
- f. CTRL+1
- g. CTRL+SHIFT+$
- h. F7
- i. CTRL+ACCENT MARK (‘)
- j. CTRL+V

1. Select cells using the keyboard.
2. Copies a formula.
3. Applies the Currency style with a floating dollar sign and two decimal places.
4. Wraps text in a cell.
5. Spell-checking a worksheet.
6. Manually recalculates formulas.
7. Pastes a formula.
8. Opens the Format Cells dialog box.
10. Displays the worksheet with formulas.

1. ANS: D  
   PTS: 1  
   REF: EX 82
2. ANS: E  
   PTS: 1  
   REF: EX 90
3. ANS: G  
   PTS: 1  
   REF: EX 103
4. ANS: A  
   PTS: 1  
   REF: EX 71
5. ANS: H  
   PTS: 1  
   REF: EX 113
6. ANS: C  
   PTS: 1  
   REF: EX 75
7. ANS: J  
   PTS: 1  
   REF: EX 90
8. ANS: F  
   PTS: 1  
   REF: EX 97
9. ANS: B  
   PTS: 1  
   REF: EX 74
10. ANS: I  
    PTS: 1  
    REF: EX 119
1. Discuss how to determine the formulas and functions needed for a worksheet.

ANS:
As you have learned, formulas and functions simplify the creation and maintenance of worksheets because Excel performs calculations for you. When formulas and functions are used together properly, the amount of data that a user manually must enter in a worksheet greatly can be diminished:

• **Utilize proper algebraic notation.** Most Excel formulas are the result of algebraic calculations. A solid understanding of algebraic operators and the order of operations is important to writing sound formulas.

• **Utilize the fill handle and copy and paste operations to copy formulas.** The fill handle and the Excel copy and paste functionality help to minimize errors caused by retyping formulas. When possible, if a similar formula will be used repeatedly in a worksheet, avoid retyping the formula and instead use the fill handle.

• **Be careful about using invalid and circular cell references.** An invalid reference occurs when Excel does not understand a cell reference used in a formula, resulting in Excel displaying a #REF! error message in the cell.

A formula in a cell that contains a reference back to itself is called a circular reference. Excel often warns you when you create a circular reference. In almost all cases, circular references are the result of an incorrect formula. A circular reference can be direct or indirect. For example, placing the formula =A1 in cell A1 results in a direct circular reference. An indirect circular reference occurs when a formula in a cell refers to another cell or cells that include a formula that refers back to the original cell.

• **Employ the Excel built-in functions whenever possible.** Excel includes prewritten formulas called functions to help you compute a range of values and statistics. A function takes a value or values, performs an operation, and returns a result to the cell. The values that you use with a function are called arguments. All functions begin with an equal sign and include the arguments in parentheses after the function name. For example, in the function =AVERAGE(C4:C12), the function name is AVERAGE, and the argument is the range C4:C12. Become familiar with the extensive number of built-in functions. When you have the choice, always use built-in functions instead of writing and typing a formula version of your mathematical expression. Such a practice reduces the possibility of errors and simplifies the formula used in a cell, resulting in improved readability.
2. Briefly discuss the order of operations.

ANS:
When more than one arithmetic operator is involved in a formula, Excel follows the same basic order of operations that you use in algebra. Moving from left to right in a formula, the order of operations is as follows: first negation (–), then all percentages (%), then all exponentiations (^), then all multiplications (*) and divisions (/), and finally, all additions (+) and subtractions (–).

As in algebra, you can use parentheses to override the order of operations. For example, if Excel follows the order of operations, 8 * 3 + 2 equals 26. If you use parentheses, however, to change the formula to 8 * (3 + 2), the result is 40, because the parentheses instruct Excel to add 3 and 2 before multiplying by 8.

PTS: 1 REF: EX 77 TOP: Critical Thinking

3. Briefly discuss displaying the formulas version of a worksheet.

ANS:
The values version of the worksheet, shows the results of the formulas you have entered, rather than the actual formulas. Excel also can display and print the formulas version of the worksheet, which shows the actual formulas you have entered, rather than the resulting values.

The formulas version is useful for debugging a worksheet. Debugging is the process of finding and correcting errors in the worksheet. Viewing and printing the formulas version instead of the values version makes it easier to see any mistakes in the formulas.

When you change from the values version to the formulas version, Excel increases the width of the columns so that the formulas and text do not overflow into adjacent cells on the right. The formulas version of the worksheet, thus, usually is significantly wider than the values version.

PTS: 1 REF: EX 119 TOP: Critical Thinking
CASE

Critical Thinking Questions

Case 2-1

Leo, owner of Leo’s Bread Company, recently installed Excel 2010 and created a new workbook to track sales of different types of bread. He wants to determine which types of bread are the most popular among his customers. He is particularly interested in sales of rye bread, onion rolls, and bagels. Leo has formatted the sales numbers with the Accounting number format.

1. After Leo enters the sales numbers into the cells, he decides he does not want the fixed dollar sign to appear on the far left of the cell, separated by spaces from the actual value. He would prefer that the dollar sign appear immediately to the left of the first digit of the value. To specify a floating dollar sign, which of the following formats should Leo apply?
   a. Comma style  
   b. Percent style 
   c. Currency style  
   d. General number

ANS: C

PTS: 1  REF: EX 100 TOP: Critical Thinking

2. Leo wants the sales numbers for rye bread, onion rolls, and bagels to look different each time the sales for each exceeds $500. What Excel feature can Leo use to accomplish this?
   a. Spell checker 
   b. Conditional formatting 
   c. Point mode 
   d. Formulas version

ANS: B

PTS: 1  REF: EX 104 TOP: Critical Thinking
Critical Thinking Questions

Case 2-2

Anna is a competitive runner. She wants to improve her performance and decides to keep track of data for six months to determine if the time of day or year she runs affects her performance. Her worksheet contains the following data: start and end time, total time, and distance.

3. After three months, Anna wants to know the average distance she runs. What should she do to calculate the average distance?

   a. Enter the text =av in a cell at the end of the distance data; then select the AVERAGE function from the Formula AutoComplete list and then enter the function’s argument.
   b. Enter the text =ms in a cell at the end of the distance data; then select the MAX function from the Formula AutoComplete list and then enter the function’s argument.
   c. Enter the text =function in a cell at the end of the distance data; then select the AVERAGE function from the AutoFunction list and then enter the function’s argument.
   d. Enter the text =su at the end of the data in the Distance column; then select the SUM function from the Select Function list and then enter the function’s argument.

ANS: A

PTS: 1        REF: EX 84        TOP: Critical Thinking

4. Now Anna wants to know the longest total time she has run. By looking at the total time values, she finds the longest total time to be 54 minutes. Instead of manually entering that value in a cell below the total time data, Anna decides to use the MAX function to determine the longest total time. Why did Anna prefer to use the MAX function?

   a. She believes that 54 minutes is her best running time.
   b. The MAX function recalculates the highest value each time a new value is entered into the worksheet.
   c. She believes that 54 minutes is not her best running time.
   d. The MAX function provides a constant value that will not change for this cell when a new value is entered into the worksheet.

ANS: B

PTS: 1        REF: EX 87        TOP: Critical Thinking