Chapter 2: Solving Problems with Statistical Analysis Tools

TRUE/FALSE

1. Microsoft Excel provides a variety of predefined functions, including statistical functions, that you can use to determine such values as the arithmetic mean, median, mode, and standard deviation of a set of data.

   ANS: T PTS: 1 REF: 79

2. The median is the arithmetic average of a set of numbers.

   ANS: F PTS: 1 REF: 80

3. The standard deviation tells you how closely together values are distributed.

   ANS: T PTS: 1 REF: 82

4. The ROUND argument *num_digits* is a single value that can be a constant, a cell reference where the cell contains a numerical value, or another formula that results in a single number value.

   ANS: F PTS: 1 REF: 85

5. The formula =ROUNDUP(3.432,1) rounds the value 3.432 up to the next highest tenth, or 3.5.

   ANS: T PTS: 1 REF: 86

6. The Format Painter can be used to copy a format into multiple noncontiguous cells.

   ANS: T PTS: 1 REF: 88

7. Selecting the Set precision as displayed workbook option permanently changes the values in all workbook cells from full precision, which is six digits, to whatever format is displayed in that cell.

   ANS: F PTS: 1 REF: 88

8. If you select the Paste option button called Values, you will paste only the values; the formulas and any formatting from the original cell(s) are not pasted.

   ANS: T PTS: 1 REF: 90

9. The Paste Special dialog box offers Operation options, which allow you to paste values using only three arithmetic operations: Add, Subtract, and Multiply.

   ANS: F PTS: 1 REF: 92

10. The statistical function MODE returns the most frequently occurring value in a range of data.

    ANS: T PTS: 1 REF: 93

11. The technique used to fix certain rows while you scroll to other rows in a worksheet is called freezing panes.

ANS: T PTS: 1 REF: 95

12. A way to analyze the differences between two sets of data is to look at the percent difference of a value in one data set compared with that value in the second data set.

    ANS: T PTS: 1 REF: 99

13. The syntax of the RANK.EQ function is as follows: RANK(number,sort,order).

    ANS: F PTS: 1 REF: 105 | 106

14. With the LARGE function, the argument called *analysis* describes the range of cells being evaluated.

    ANS: F PTS: 1 REF: 107

15. The SMALL function determines the *n*th smallest value in a range.

    ANS: T PTS: 1 REF: 109

16. The COUNTONLY function counts the number of items in a range that meet specified criteria.

    ANS: F PTS: 1 REF: 111

17. The values TRUE and FALSE are referred to as Boolean values.

    ANS: T PTS: 1 REF: 112

18. Relational operators are used to compare data.

    ANS: T PTS: 1 REF: 113

19. Result Seek uses an iterative approach to finding the right input that achieves the desired result, or goal, in the dependent cell.

    ANS: F PTS: 1 REF: 134

20. Simulation is an analytical method that creates artificially generated data to imitate real data.

    ANS: T PTS: 1 REF: 139

MODIFIED TRUE/FALSE

1. The median is the arithmetic value that occurs in the middle of a data set when organized from lowest to highest, where half the values are less than and half the values are greater than the median value. _____

    ANS: T PTS: 1 REF: 80

2. The Paste option called Paste Special pastes a connection to the original cells, including the applied formatting. _____

    ANS: F

Paste Link
Paste link
paste link

PTS: 1 REF: 91

3. In the function RANK.EQ(number,ref,order), the *number* argument refers to the value to be ranked. _____

ANS: T PTS: 1 REF: 105

4. The BIG function determines the *n*th largest value in a range. _____

ANS: F, LARGE

PTS: 1 REF: 107

5. To obtain the value for the lowest or highest Friction Coefficient values, the MIN and MAX functions would suffice. _____

ANS: T PTS: 1 REF: 107

6. The critical argument is essentially a test that the data must meet in order for it to be counted in the grouping. _____

ANS: F, criteria argument

PTS: 1 REF: 111

7. To determine if a value is greater than or equal to another value, you can use syntax operators. _____

ANS: F, relational

PTS: 1 REF: 113

8. Wingdings are symbols that you can use as part of the criteria to search for text strings; each symbol can be substituted for a character or set of characters. _____

ANS: F, Wildcards

PTS: 1 REF: 113

9. The COUNTIF function accommodates a(n) single contiguous range argument. _____

ANS: T PTS: 1 REF: 116

10. In the SUMIF function, the *criteria* argument identifies the cell range where the criteria are located. _____

ANS: F, range

PTS: 1 REF: 118

11. The ADDIF function adds all the values in a range that meet specified criteria. _____

    ANS: F, SUMIF

    PTS: 1 REF: 118

12. The Format Cells dialog box, which can be opened from the Number group Dialog Box Launcher on the HOME tab, provides many options for changing the display of cell values. _____

    ANS: T PTS: 1 REF: 125

13. Excel uses the Goal Find tool to try various input values in order to calculate the required input to achieve your desired outcome. _____

    ANS: F, Goal Seek

    PTS: 1 REF: 131

14. The RANDOM function randomly assigns a number between two specified values. _____

    ANS: F, RANDBETWEEN

    PTS: 1 REF: 140

15. You can recalculate a worksheet at any time by pressing the F9 function key or by selecting the Refresh button found in the Calculation group on the FORMULAS tab on the ribbon. _____

    ANS: F, Calculate Now

    PTS: 1 REF: 142

MULTIPLE CHOICE

1. Microsoft Excel allows you to use ____, such as LARGE, SMALL, and RANK.EQ, that help you to structure and analyze data in meaningful ways.
   a. functions
   b. charts
   c. rules
   d. arguments

   ANS: A PTS: 1 REF: 79

2. The ____ is the arithmetic average of a set of numbers.
   a. mean
   b. median
   c. mode
   d. standard deviation

   ANS: A PTS: 1 REF: 80

3. The ____ is the arithmetic value that occurs in the middle of a data set when organized from lowest to highest, where half the values are less than and half the values are greater than the median value.
   a. mean
   c. mode

b. median
d. standard deviation

ANS: B PTS: 1 REF: 80

4. The ____ is the arithmetic value that occurs most frequently in a data set.
   a. mean
   b. median
   c. mode
   d. standard deviation

   ANS: C PTS: 1 REF: 80

5. The ____ is a measure of how widely the data values are dispersed from the arithmetic mean.
   a. mean
   b. median
   c. mode
   d. standard deviation

   ANS: D PTS: 1 REF: 80

6. Consider the following five values: 1, 1, 6, 7, and 10. The arithmetic mean of these values is ____.
   a. 1
   b. 3.94
   c. 5
   d. 6

   ANS: C PTS: 1 REF: 80

7. A(n) ____ distribution exhibits an equal number of occurrences of data values both below and above the arithmetic mean.
   a. normal
   b. skewed
   c. simulated
   d. angular

   ANS: A PTS: 1 REF: 80

8. The ____ of a normal distribution are the same value.
   a. mean, median, and mode
   b. mean and median
   c. mean, median, mode, and standard deviation
   d. median and mode

   ANS: A PTS: 1 REF: 80

9. The ____ function algorithm rounds down all values of less than half the range, and rounds up values from half the range and above.
   a. AVERAGE
   b. NORMAL
   c. DOWN
   d. ROUND

   ANS: D PTS: 1 REF: 86

10. The ROUND argument *num_digits* is the specified number of ____.
    a. decimal places
    b. digits
    c. integers
    d. operators

    ANS: A PTS: 1 REF: 85

11. If you wrote the formula =ROUNDDOWN (25.83%,2), the resulting value would be ____.
    a. 26%
    b. 25%
    c. 25.8%
    d. 25.83%

    ANS: B PTS: 1 REF: 87

12. If you wrote the formula =ODD(1.23), the resulting value would be ____.

a. 1
b. 2
c. 3
d. 4

ANS: C PTS: 1 REF: 87

13. If you wrote the formula =TRUNC(-4.382,1), the resulting value would be ____.
a. -4
b. -4.3
c. -4.38
d. -4.382

ANS: B PTS: 1 REF: 87

14. Use ____ to copy a format from one cell to another cell or group of contiguous cells.
a. the Format Painter
b. the Format Copier
c. Paint
d. Special Format

ANS: A PTS: 1 REF: 88

15. Selecting the Set precision as displayed workbook option permanently changes the values in all workbook cells from full precision (____ digits) to whatever format is displayed in that cell, including the number of decimal places.
a. 5
b. 9
c. 15
d. 21

ANS: C PTS: 1 REF: 88

16. The simplest method to copy information is to first select the information you want to copy, and then use the Copy button and the Paste button in the Clipboard group on the ____ tab.
a. FORMAT
b. HOME
c. INSERT
d. DATA

ANS: B PTS: 1 REF: 90

17. The Paste option called ____ pastes the contents of the copied cells(s) as a picture.
a. Picture
b. As Picture
c. Paste Picture
d. Paste Graphic

ANS: A PTS: 1 REF: 91

18. The Paste option called ____ pastes the formulas and formatting from the original range of cells, but reverses the orientation so that the rows of the original cell range become the columns in the pasted range, and the original columns become rows.
a. Transpose
b. Switch
c. Wildcard
d. Turn

ANS: A PTS: 1 REF: 90

19. The Paste option button option called ____ pastes the formulas and formatting from the original cell(s), but not the format of the cell borders.
a. Keep Source Formatting
b. No Borders
c. Document Theme
d. Destination Formatting

ANS: B PTS: 1 REF: 90

20. The Paste option button called ____ pastes the data and formulas from the original cell(s), and maintains the column width of the original cell(s).
a. Column Stay
c. Keep Source Column Widths

b. Width Only
d. Keep Column Size

ANS: C PTS: 1 REF: 90

21. The Paste Special dialog box offers the ____ option, which enables you to copy and paste a cell range that contains one or more blank cells where the blank cells are not pasted over any existing values in the range into which they are pasted.
a. Copy Blanks
c. Comments
b. Blank Over
d. Skip Blanks

ANS: D PTS: 1 REF: 92

22. The MODE.SNGL, MEDIAN, and STDEV.S functions work in a similar way, containing only one type of argument, which is ____.
a. sort order
c. a range of values for comparison
b. a list of values
d. ranking parameters

ANS: B PTS: 1 REF: 93

23. A list of values can contain ____.
a. constants and cell references
c. a two-dimensional block of cells
b. a range of cells along a column or row
d. all of the above

ANS: D PTS: 1 REF: 93

24. With a ____ function, you include that function inside another formula or function as one of its arguments.
a. nested
c. child
b. parent
d. linked

ANS: A PTS: 1 REF: 94

25. The technique used to fix certain rows while you scroll to other rows in a worksheet is called ____ panes.
a. freezing
c. keeping
b. sticking
d. locking

ANS: A PTS: 1 REF: 95

26. A technique you can use to see different parts of the screen at the same time is to ____ the window by dragging either the horizontal split box or the vertical split box to create separate, scrollable panes.
a. split
c. crack
b. delete
d. separate

ANS: A PTS: 1 REF: 96 | 97

27. To calculate a(n) ____ between two data sets, you subtract the old value from the new value and then divide the difference by the old value.
a. average difference
c. percent difference
b. standard deviation difference
d. none of the above

ANS: C PTS: 1 REF: 99

28. The ____ function allows you to sort a list and then count the number of entries either above or below the value in question.
a. RANK.EQ
c. FIND

b. POSITION
d. COUNT

ANS: A PTS: 1 REF: 105

29. In the LARGE function, the second argument, *k*, is the desired ranking, where 1 is ____.
a. the largest value
b. the smallest value
c. required
d. not allowed

ANS: A PTS: 1 REF: 107

30. In the SMALL function, the first argument, *array*, is ____.
a. a formula
b. the desired ranking
c. a range of cells
d. a time period

ANS: C PTS: 1 REF: 109

31. The syntax of the COUNTIF function is ____.
a. =COUNTIF(range,array)
b. =COUNTIF(ref,range)
c. =COUNTIF(array,k)
d. =COUNTIF(range,criteria)

ANS: D PTS: 1 REF: 111

32. The values TRUE and FALSE are referred to as ____.
a. operational imperatives
b. Boolean values
c. base values
d. syntax neutral

ANS: B PTS: 1 REF: 112

33. The symbols > and >= are examples of ____.
a. relational operators
b. relational values
c. arrays
d. reference operators

ANS: A PTS: 1 REF: 113

34. ____ are symbols that you can use as part of the criteria to search for text strings in which the symbol can be substituted for another character or set of characters.
a. Wingdings
b. Wildwheels
c. Open Text symbols
d. Wildcards

ANS: D PTS: 1 REF: 113

35. The ____ wildcard specifies that any number of characters can be substituted.
a. asterisk (*)
b. question mark (?)
c. forward slash (/)
d. backward slash (\)

ANS: A PTS: 1 REF: 113

36. The ____ wildcard specifies that a single character can be substituted.
a. asterisk (*)
b. question mark (?)
c. forward slash (/)
d. backward slash (\)

ANS: B PTS: 1 REF: 113 | 114

37. Wildcards work with ____.
a. numbers
b. dates
c. text
d. all of the above

ANS: C PTS: 1 REF: 114

38. With the COUNTIF function, the first time it encounters the comma delimiter, it assumes that what follows is ____.
a. a date
b. a number
c. additional ranges
d. the criteria

ANS: D PTS: 1 REF: 116

39. The Format Cells dialog box, which can be opened from the ____ group Dialog Box Launcher on the HOME tab, provides many options for changing the display of cell values.
a. Cells
b. Data
c. Number
d. Data

ANS: C PTS: 1 REF: 125

40. A format code can include up to four parts, each separated by a semicolon, and does NOT include ____.
a. negative number format
b. positive number format
c. zero value format
d. placeholder format

ANS: D PTS: 1 REF: 127

41. The ____ symbol acts as a digit placeholder that displays significant digits.
a. #
b. 0
c. ?
d. %

ANS: A PTS: 1 REF: 128

42. The ____ symbol acts as a digit placeholder that displays both significant and insignificant zeros.
a. #
b. 0
c. ?
d. %

ANS: B PTS: 1 REF: 128

43. The ____ symbol acts as a digit placeholder that does not display insignificant digits, but does hold a place so that decimal points will align.
a. #
b. 0
c. ?
d. %

ANS: C PTS: 1 REF: 128

44. The ____ symbol inserts a percentage sign and automatically multiplies the value inserted by 100 for display.
a. #
b. 0
c. ?
d. %

ANS: D PTS: 1 REF: 128

45. The ____ symbol(s) insert(s) a comma as a thousands separator or as a scaling operator.
a. ,
b. *
c. “”
d. @

ANS: A PTS: 1 REF: 128

46. The ____ symbol(s) indicate(s) repetition of the following character enough times to fill the column to its complete width.
    a. ,
    b. *
    c. “”
    d. @

    ANS: B PTS: 1 REF: 128

47. The ____ symbol(s) specify/specifies that text enclosed in between these marks should be inserted as shown.
    a. ,
    b. *
    c. “”
    d. @

    ANS: C PTS: 1 REF: 128

48. The ____ symbol(s) indicate(s) the location where text should be inserted in cells formatted with a custom format.
    a. ,
    b. *
    c. “”
    d. @

    ANS: D PTS: 1 REF: 128

49. The ____ symbol indicates to skip the width of the next character. It’s frequently used with ( ) to make sure positive numbers align with negative numbers displayed with ( ).
    a. _ (underscore)
    b. - (dash)
    c. @
    d. +

    ANS: A PTS: 1 REF: 128

50. Performing a ____ analysis means, simply, to determine the outcome of changing one or more input values and to evaluate the recalculated results.
    a. maybe
    b. what-if
    c. factor
    d. research

    ANS: B PTS: 1 REF: 131

51. When using Goal Seek, you can specify the outcome you want and which input value you want to vary, and Excel ____.
    a. gives you a set of code to use in a database program
    b. automatically calculates the solution
    c. prompts you with a dialog box
    d. none of the above

    ANS: B PTS: 1 REF: 131

52. In the Goal Seek dialog box, the cell containing the data to vary in order to reach the desired output is labeled ____.
    a. By changing cell
    b. What to change
    c. What if
    d. Vary

    ANS: A PTS: 1 REF: 132

53. In the Goal Seek dialog box, you use the Set cell box to specify the cell ____.
    a. in which the output value will appear
    b. that contains the formula to use
    c. with the output label
    d. none of the above

    ANS: A PTS: 1 REF: 132

54. The Step button in Goal Seek ____.
    a. allows you to step through each iteration one step at a time
    b. returns the data in separate spreadsheets
    c. walks you through the steps similar to a wizard
    d. none of the above

    ANS: A PTS: 1 REF: 134

55. Once the Goal Seek Status dialog box gives the target value, you can click ____ to update your worksheet with the new values based on Goal Seek.
    a. OK
    b. Update
    c. New
    d. Cancel

    ANS: A PTS: 1 REF: 132

56. In Goal Seek, if the target value cannot be reached exactly, the ____.
    a. Goal Seek dialog box asks for your input
    b. value of zero is listed as the current value
    c. closest value found is listed as the current value
    d. none of the above

    ANS: C PTS: 1 REF: 132

57. Goal Seek uses ____ approach to finding the right input that achieves the desired result, or goal, in the dependent cell.
    a. a database
    b. an iterative
    c. a scientific
    d. a random

    ANS: B PTS: 1 REF: 134

58. Goal Seek continues to enter values until it reaches ____.
    a. 0.001 of the goal
    b. 100 iterations
    c. either a or b
    d. neither a nor b

    ANS: C PTS: 1 REF: 134

59. The ____ function provided by Excel averages a series of values if they meet specific criteria.
    a. COUNTIF
    b. SUMIF
    c. AVERAGE
    d. none of the above

    ANS: D PTS: 1 REF: 136

60. Goal Seek allows you to vary ____ input(s).
    a. a single
    b. up to 3
    c. up to 5
    d. up to 10

    ANS: A PTS: 1 REF: 134

61. The input for Goal Seek can be ____.
    a. a constant value
    b. derived from a formula
    c. either a or b
    d. neither a nor b

    ANS: A PTS: 1 REF: 135

62. The syntax of the AVERAGEIF function ____ is very similar to the syntax of the SUMIF function.

a. (range,criteria,average_range)
b. (criteria,average,range)
c. (ref,range,criteria)
d. (array,average_range,ref)

ANS: A PTS: 1 REF: 136

63. ____ is an analytical method that creates artificially generated data to imitate real data.
a. Simulation
b. Play acting
c. Role playing
d. Regression

ANS: A PTS: 1 REF: 139

64. A simulation that is based on randomly generating specific values that have an equal chance of appearing, such as numbers on a set of dice, is often referred to as a ____ simulation.
a. Las Vegas
b. Blackjack
c. Lucky 7
d. Monte Carlo

ANS: D PTS: 1 REF: 139

65. The ____ function randomly assigns a number between two specified values.
a. RANGERANDOM
b. RANDBETWEEN
c. INBETWEEN
d. RANDOM

ANS: B PTS: 1 REF: 140

66. The ____ function returns a random value between 0 and 1.
a. RANDUNDER
b. RAND
c. RANDZERO
d. RANDONE

ANS: B PTS: 1 REF: 140

67. The formula =RANDBETWEEN(1,3) randomly returns a(n) ____.
a. integer with three numbers
b. 1, 2, or 3
c. number with three decimal places
d. none of the above

ANS: B PTS: 1 REF: 140

68. Automatic calculation can be turned off from the ribbon or from the ____ dialog box accessed via the FILE tab.
a. Excel Options
b. Worksheet Options
c. Automatic Options
d. Ribbon Options

ANS: A PTS: 1 REF: 142

69. When working with the RAND and RANDBETWEEN functions, every time you enter another value in a cell anywhere on the worksheet, the random values ____.
a. automatically change
b. prompt you with a dialog box
c. prompt you with an error message
d. stay the same

ANS: A PTS: 1 REF: 141

70. You can recalculate a worksheet at any time by pressing the ____ function key.
a. F5
b. F7
c. F8
d. F9

ANS: D PTS: 1 REF: 142

Case-Based Critical Thinking Questions

Case 2-1

Relational Operator
>
<
>=
<=
=
<>

Julia is learning how to use relational operators with the COUNTIF function. Her boss handed her the chart in the above figure and asked her to solve some everyday business problems.

71. Julia wants to take a count of all employees who are participating in more than one committee. The data is listed in column F of a worksheet. The correct formula would be ____.
    a. =COUNTIF(F3:F13,"<1")
    b. =COUNTIF(F3:F13,">1")
    c. =COUNTIF(F3:F13,">=1")
    d. =COUNTIF(F3:F13,"=1")

    ANS: B PTS: 1 REF: 112 TOP: Critical Thinking

72. Julia wants to take a count of all employees who are participating in exactly one committee. The correct formula would be ____.
    a. =COUNTIF(F3:F13,"<1")
    b. =COUNTIF(F3:F13,">1")
    c. =COUNTIF(F3:F13,">=1")
    d. =COUNTIF(F3:F13,"=1")

    ANS: D PTS: 1 REF: 112 TOP: Critical Thinking

73. After showing her boss the data, he asked her to run one more COUNTIF to determine who is on one or more committees. The correct formula would be ____.
    a. =COUNTIF(F3:F13,"<1")
    b. =COUNTIF(F3:F13,">1")
    c. =COUNTIF(F3:F13,">=1")
    d. =COUNTIF(F3:F13,"=1")

    ANS: C PTS: 1 REF: 112 TOP: Critical Thinking

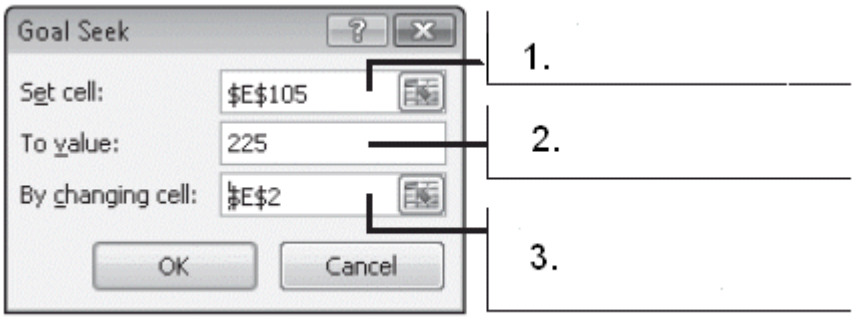
74. On a separate project, the head of Human Resources is looking for a list of people who do *not* have 100% attendance. In the database, the number 1 means 100% attendance; all other numbers indicate that some work was missed (for example, .75 is 75% attendance). The data is listed in column E of a worksheet. The correct COUNTIF formula would be ____.
    a. =COUNTIF(E3:E13,"<>1")
    b. =COUNTIF(E3:E13,"=1")
    c. =COUNTIF(E3:E13,">=1")
    d. =COUNTIF(E3:E13,"<1")

    ANS: A PTS: 1 REF: 112 TOP: Critical Thinking

75. If the Human Resources director wanted a list of people who *do* have 100% attendance, the correct formula would be ____.
    a. =COUNTIF(E3:E13,"<>1")
    b. =COUNTIF(E3:E13,"=1")
    c. =COUNTIF(E3:E13,">=1")
    d. =COUNTIF(E3:E13,"<1")

    ANS: B PTS: 1 REF: 112 TOP: Critical Thinking

Case-Based Critical Thinking Questions
Case 2-2



Nevia is using Goal Seek for the first time. She is determining what to put in each text box inside the Goal Seek dialog box shown in the above figure.

76. If you were to help Nevia, you would tell her that the space labeled #1 in the above figure ____.
    a. indicates the cell containing the output value
    b. indicates the desired output value
    c. indicates the cell containing the data to vary in order to reach the desired output
    d. none of the above

    ANS: A PTS: 1 REF: 132 TOP: Critical Thinking

77. Nevia has told you that the desired value is 325. In which text box should she insert the desired value?
    a. #1
    b. #2
    c. #3
    d. none of the above

    ANS: B PTS: 1 REF: 132 TOP: Critical Thinking

78. Nevia's boss stops by her desk and asks which of the three numbers in the above figure is considered to be the dependent data, and she correctly answers ____.
    a. #1
    b. #2
    c. #3
    d. none of the above

    ANS: C PTS: 1 REF: 132 TOP: Critical Thinking

79. At the end of the project, Nevia is very pleased with the results and is giving a demo of Goal Seek to a few of her co-workers. To open Goal Seek, her first step is to click the ____ tab on the ribbon.
    a. FORMULAS
    b. PAGE LAYOUT
    c. REVIEW
    d. DATA

    ANS: D PTS: 1 REF: 132 TOP: Critical Thinking

80. Once Nevia clicks the correct tab, to open Goal Seek, she clicks the ____ button in the Data Tools group, then selects Goal Seek.
    a. What-If Analysis
    b. Simulation
    c. Goal Minder
    d. Data Dialog

    ANS: A PTS: 1 REF: 132 TOP: Critical Thinking

COMPLETION

1. _____ is a measure of how widely the data values are dispersed from the arithmetic mean.

   ANS: Standard deviation

   PTS: 1 REF: 80

2. To specify that a value should be precisely stored to the nearest hundredth, use the _____ function.

   ANS:
   ROUND
   Round
   round

   PTS: 1 REF: 84 | 85

3. The formula =_____(3.432,1) rounds the value 3.432 up to the next highest tenth, or 3.5.

   ANS:
   ROUNDUP
   Roundup
   roundup

   PTS: 1 REF: 86

4. The _____ Paste option button pastes the formulas and formatting from the original cell(s), but not the format of the cell borders.

   ANS: No Borders

   PTS: 1 REF: 90

5. The _____ Paste option button pastes only the formulas from the original (copied) cell(s).

   ANS: Formulas

   PTS: 1 REF: 90

6. The _____ Paste option button pastes values from the original cell(s) and formatting.

   ANS:
   Values & Source Formatting
   Values and Source Formatting
   values & source formatting
   values and source formatting

   PTS: 1 REF: 90

7. The _____ Paste option button pastes a connection to the original cell, including the applied formatting.

ANS:
Paste Link
paste link

PTS: 1 REF: 91

8. The MODE.SNGL, MEDIAN, and STDEV.S functions work in a similar way, containing only one type of _____, which is a list of values.

ANS: argument

PTS: 1 REF: 93

9. When you _____ a function, you include that function inside another formula or function as one of its arguments.

ANS: nest

PTS: 1 REF: 94

10. Excel provides several tools for displaying and scrolling columns and/or rows so that certain areas can be fixed, or _____, and the remainder of the worksheet can be scrolled easily.

ANS: frozen

PTS: 1 REF: 95

11. To split an Excel window vertically, click the _____ after clicking to the right and below the location where you want to divide the window.

ANS: split button

PTS: 1 REF: 96

12. To split the screen both vertically and horizontally so there are five rows at the top and three columns on the left, place the cursor in the _____ column displayed on the screen in the sixth row of the worksheet.

ANS:
fourth
4th

PTS: 1 REF: 96

13. To calculate a(n) _____ between two data sets, you subtract the old value from the new value and then divide the difference by the old value.

ANS: percent difference

PTS: 1 REF: 99

14. In the function RANK.EQ(number,ref,[order]), the _____ argument is the range of values the number is being compared with.

ANS:
REF
Ref
ref

PTS: 1 REF: 105

15. The _____ function counts the number of items in a range that meet specified criteria.

ANS: COUNTIF

PTS: 1 REF: 111

16. Wildcards do not work with values that are numbers or dates, only _____.

ANS: text

PTS: 1 REF: 114

17. The relational operator >= stands for _____ than or equal to.

ANS: greater

PTS: 1 REF: 113

18. When the # symbol acts as a placeholder for a digit, it is considered to be a(n) _____ code.

ANS: number formatting

PTS: 1 REF: 128

19. Up to four different format codes can be applied to a cell: one for positive numbers, one for negative numbers, one for zero values, and one for _____.

ANS: text

PTS: 1 REF: 127

20. Performing a(n) _____ analysis means, simply, to determine the outcome of changing one or more input values and to evaluate the recalculated results.

ANS:
what-if
what if

PTS: 1 REF: 131

MATCHING

Wildcard	Formula	
*	=COUNTIF(H2:H13,"*3")	1.
*	=COUNTIF(H2:H13,"*1*")	2.
?	=COUNTIF(H3:H13,"?313")	3.
?	=COUNTIF(H3:H13,"*3??")	4.

Using the above figure, identify the letter of the choice that best matches the figure.

a. Counts all Inspector IDs that contain the text value "1" anywhere in the value (A313, C321, B313, and so on)
b. Counts all Inspector IDs that end with the text value "3"
c. Counts all Inspector IDs that have the value "3" in the third-to-last position in the text value, regardless of the number of preceding characters
d. Counts all Inspector IDs with a single character followed by the characters "313"; notice that cell H7 is not counted because it contains two characters preceding the characters "313"

1. #1
2. #2
3. #3
4. #4

1. ANS: B PTS: 1 REF: 114
2. ANS: A PTS: 1 REF: 114
3. ANS: D PTS: 1 REF: 114
4. ANS: C PTS: 1 REF: 114

Identify the letter of the choice that best matches the function.

a. =ROUND(25.449,0)
b. =ROUND(SUM(10.33,10.44),0)
c. =ROUND(25.33%,2)
d. =INT(-4.3)
e. =ROUND(103234,-2)
f. =ROUND(23.75%,2)
g. =ROUNDDOWN(9.99,0)
h. =EVEN(2.23)

5. 24%
6. 21
7. 25%
8. -5
9. 25
10. 9
11. 4

12. 103,200

5. ANS: F PTS: 1 REF: 86 | 87
6. ANS: B PTS: 1 REF: 86 | 87
7. ANS: C PTS: 1 REF: 86 | 87
8. ANS: D PTS: 1 REF: 86 | 87
9. ANS: A PTS: 1 REF: 86 | 87
10. ANS: G PTS: 1 REF: 86 | 87
11. ANS: H PTS: 1 REF: 86 | 87
12. ANS: E PTS: 1 REF: 86 | 87

ESSAY

1. List and explain briefly mean, median, mode, and standard deviation.

   ANS:
   • Mean is the arithmetic average of a set of numbers.
   • Median is the arithmetic value that occurs in the middle of a data set when organized from lowest to highest, where half the values are less than and half the values are greater than the median value.
   • Mode is the arithmetic value that occurs most frequently in a data set.
   • Standard deviation is a measure of how widely the data values are dispersed from the arithmetic mean.

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2. Describe what the arguments are for this function: =SUMIF(range,criteria,sum_range).

   ANS:
   • The *range* argument identifies the cell range where the criteria are located.
   • The *criteria* argument specifies which values should be selected.
   • The *sum_range* argument identifies the corresponding cell range to sum if the specified criteria have been met in the range established by the range argument. If the *sum_range* argument is omitted, the function adds the values in the range indicated by the first argument.

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3. Explain what the following four number formatting codes do when used in Excel: #, 0, ?, and %. Write one sentence about each symbol and give an example of how it can be used.

   ANS:
   The # symbol acts as a digit placeholder that displays significant digits (for example, ####.#).
   The 0 symbol acts as a digit placeholder that displays both significant and insignificant zeros (for example, 0.00).
   The ? symbol acts as a digit placeholder that does not display insignificant digits, but does hold a place so that decimal points will align (for example, 0.00?).
   The % symbol inserts a percentage sign and automatically multiplies the value inserted by 100 for display (for example, #%).

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