

## Quick Concepts Check Answer Key

### Exploring Microsoft Excel, Chapter 2

- 1. Describe happens when you copy a formula containing a relative cell reference one row down.**

The cell references in the copied formula adjust one row down. For example, if the original formula is =B1+C1, the copied formula would be =B2+C2. The column letters remain the same while the row numbers change relative to the direction (down) that you copy the formula.

- 2. Explain why you would use an absolute reference in a formula.**

You would use an absolute reference when you want a permanent reference to a particular cell and don't want that reference to change when you copy the formula to another location.

- 3. Describe the benefits of using a mixed reference.**

When applicable, mixed references can be used in place of absolute references as a method of shortening the length of the formula.

- 4. Describe two different methods of entering a function directly in a cell.**

Formula AutoComplete provides a list of function names as you type. Function ScreenTips provide the syntax of a function as you type it, where the name of the argument you are currently typing is bold.

- 5. Outline the type of data you enter in a Function Arguments dialog box, and list four things the dialog box displays.**

You enter the required and optional arguments for a particular function. The dialog box tells you the values stored in the respective arguments, the function results, a description of the active argument, a link to get help on the function, and a description of the function itself.

- 6. Explain the difference between the COUNT and COUNTA functions.**

The COUNT function counts the number of cells in a range that contain a numeric value. The COUNTA function counts the number of cells in a range that are not blank.

- 7. Explain the difference between using the TODAY function and manually entering a date in a cell.**

Using the TODAY function will insert the current date in a cell based on the corresponding serial number. This date will be updated every time the worksheet is opened or printed. A date that is manually typed in a cell is static and will not change.

- 8. Describe a situation in which an IF statement could be used.**

An IF statement could be used to calculate overtime in a payroll worksheet. IF the employee works over 40 hours, he is eligible for overtime. If not, he receives standard pay.

- 9. Describe how you should structure a vertical lookup table if you need to look up values in a range.**

The lookup values need to be in the first column of the lookup table, and if the last optional argument for range\_lookup is TRUE (or omitted), then the first column of the lookup table should be sorted in ascending order.

**10. Explain why the PMT function often produces negative results.**

The PMT function often produces negative results because Excel understands accounting cash flow. Since the PMT function yields a periodic payment, this would be a negative cash flow to the consumer.