# Quick Concepts Check Answer Key Exploring Microsoft Excel 2016, Chapter 7

1. **What is the difference between a single IF statement and a nested IF statement?**  
   A single IF function includes only one logical test, one value\_if\_true argument, and one value\_if\_false argument. A nested IF function includes a logical test but contains one or more value\_if\_true or value\_if\_false arguments that include a nested IF function for more complex logical tests when more than two results may exist.
2. **In what situation would you use an AND function over a nested IF statement?**  
   AND functions are used when you need to test more than one condition in which ALL conditions must be true to return a specific result.
3. **What is the benefit of nesting the MATCH function inside the INDEX function?**  
   Nesting the MATCH function within the INDEX function will help reduce the number of cells containing functions. The benefit is that nesting MATCH within the INDEX function combines the functionality of the functions to look for a match and return a meaningful value or label all within one calculation.
4. **Why would you use advanced filtering instead of basic filtering?**  
   Advanced filtering gives the ability to apply multiple filters to a single data set.
5. **What are the benefits of using database functions?**  
   Database functions analyze data and select records that satisfy specific criteria.
6. **Why would you use a database function instead of advanced filtering?**  
   Database functions have the ability to apply calculations to selected data that meet the criteria. Advanced filtering only restricts the view to display data that meets predefined criteria.
7. **What is the difference between PV and NPV calculations?**  
   Present value (PV) calculates the total present (i.e., current) value of a series of payments that will be made in the future. Net present value (NPV) calculates present value of an investment, given a fixed discount rate (rate of return) and a set of given cash inflows.
8. **In what situation would you use IPMT and PPMT?**  
   IPMT calculates only the interest portion of a specific payment of a loan or investment. You would use this function when calculating the amount of interest paid on one specific payment of a loan. PPMT calculates only the principal portion of a specific payment of a loan or investment. You would use this function when calculating the specific principal paid on a specific payment of a loan.
9. **What is the difference between IPMT and CUMIPMT?**  
   CUMIPMT calculates total interest paid to date, IPMT calculates specific interest for a specified payment.