CRITICAL THINKING - CHAPTER 7

1. The members of the Circle Class that are encapsulated:
   - Variable PI
   - getradius method
   - setradius method
   - toString method
   - equals method
   - The Constructors that are encapsulated within the package.
2. The constructor of the class must have the same name as the class.
3. The public access specifier is used in the declaration of a class and class methods to indicate that the class and method is visible to the client code.
   The private access specifier is used in the declaration of the class members when when those members should be visible to the class but not to the client code.
4. In the following code, the last statement is valid since we first assigned the instance of the class to the dot variable and then are setting the radius of the circle using the radius method in the class and modifying it.
5. A. Roo
   B. Variable x
   C. getX
   D. setX
   E. factor
   F. Roo, the same as the class.
   G. 4 member methods
6. A class is a data type that defines variables for the state of an object and methods for an object's behavior. An object is an instance of a class. It stores data and can perform actions and provide communication.
9. A. Data member z is a constant.
   B. y and x are variables
   C. y is an instance member
   D. x,y and z are all class members