

1. The members of the Circle class that are encapsulated are the private fields (data members) such as radius. These are accessed indirectly through public methods (e.g., getters and setters).
2. The constructor of a class must have the same name as the class itself.
3. A private class restricts access to the member within the class only. A public class allows the member to be accessed from outside the class by any code.
4. The last statement is invalid because radius is likely declared as private. Private members cannot be accessed directly from outside the class.
5.
 - a. The name of the class is Roo.
 - b. The data member is x.
 - c. The accessor method is getX().
 - d. The modifier method is setX(int z).
 - e. The helper method is factor().
 - f. The constructor is Roo().
 - g. There are 5 method members: Roo(), setX(int z), getX(), calculate(), and factor().
6. A class is a blueprint or template that defines the structure and behavior (fields and methods) of objects while an object is an instance of a class, containing real data and providing functionality defined by the class.
9.
 - a) The constant data member is z, as it is declared with final.
 - b) The instance member is y.
 - c) The class members are x and z, as they are declared with static.
 - d) The data member z is both a class member and a constant.