



Module 6 Mastery Check

6

A Closer Look at Methods and Classes

1. Given this fragment,

```
class X {
    private int count;
```

is the following fragment correct?

```
class Y {
    public static void main(String args[]) {
        X ob = new X();

        ob.count = 10;
```

2. An access specifier must _____ a member's declaration.
3. The complement of a queue is a stack. It uses first-in, last-out accessing and is often likened to a stack of plates. The first plate put on the table is the last plate used. Create a stack class called **Stack** that can hold characters. Call the methods that access the stack **push()** and **pop()**. Allow the user to specify the size of the stack when it is created. Keep all other members of the **Stack** class private. (Hint: you can use the **Queue** class as a model; just change the way the data is accessed.)
4. Given this class,

```
class Test {
    int a;
    Test(int i) { a = i; }
}
```

write a method called **swap()** that exchanges the contents of the objects referred to by two **Test** object references.

5. Is the following fragment correct?

```
class X {
    int meth(int a, int b) { ... }
    String meth(int a, int b) { ... }
```

6. Write a recursive method that displays the contents of a string backwards.
7. If all objects of a class need to share the same variable, how must you declare that variable?
8. Why might you need to use a **static** block?
9. What is an inner class?

10. To make a member accessible by only other members of its class, what access specifier must be used?
11. The name of a method plus its parameter list constitutes the method's _____.
12. An **int** argument is passed to a method by using call-by-_____.
13. Create a varargs method called **sum()** that sums the **int** values passed to it. Have it return the result. Demonstrate its use.
14. Can a varargs method be overloaded?
15. Show an example of an overloaded varargs method that is ambiguous.