

Set 06 Answers

1. Write a class whose members include a few static variables and a few static methods. Then write a driver that calls the static methods and uses the static variables in some way.

Answers vary.

2. True/False: In order to run a static method, you must run it for a particular object (the current object).

FALSE

3. True/False: In order to run an instance method, you must run it for a particular object (the current object).

TRUE

4. True/False: An instance variable can be declared as `_static_`.

FALSE

5. True/False: The same class can contain some members that are static and some members that are non-static.

TRUE

6. Which kinds of variables are given default values if you do not initialize them? (Local/ instance/static? Which ones?)

instance and static variables are given default values. Local variables must be initialized by the programmer explicitly before they are used.

7. What default values are used for the variables mentioned above?

primitives are all set to 0; reference variables are set to "null"

8. When writing JUnit tests, is it better to write many small tests, or a few long ones?

Lots of small tests are best

9. What is JUnit?

A useful feature of Java that allows us to quickly write `_unit tests_` for classes we are writing. The tests can be run repeatedly so that as changes are made to the code we can quickly verify that everything still works properly!

10. Give an example of the correct syntax for `_assertEquals_` and `_assertTrue_` in a JUnit test.

```
assertEquals(5, 2 + 3);  
assertTrue(!_cat_.equals(_dog_));
```

11. If a JUnit test has several separate assertions in it, will the test continue after one of the assertions fails?

NO

12. If a JUnit test suite has several different JUnit tests in it (separate methods), will the rest of the tests run after one of them fails?

YES