

**Vocabulary Identification**

Given the following Java statement, answer the questions that follow:

```
Animal duck;
```

- 1) Which of the labeled parts represents the name of the variable?
  - 2) Which of the labeled parts represents the type of the variable?
  - 3) Which English statement best describes what this statement does:
    - Declare a variable
    - Assign a value to a variable
    - Retrieve a value from a variable
    - Create an object
    - Call a method
- 

Given the following Java statement, answer the questions that follow:

```
new World();
```

- 1) Which of the labeled parts is a keyword?
  - 2) Which of the labeled parts is the name of the object we are creating?
  - 3) Which English statement best describes what this statement does:
    - Declare a variable
    - Assign a value to a variable
    - Retrieve a value from a variable
    - Create an object
    - Call a method
- 

Given the following Java statement, answer the questions that follow:

```
rory.hopForward(35);
```

- 1) Which of the labeled parts is an object reference?
  - 2) Which of the labeled parts is the name of a method?
  - 3) Which of the labeled parts is the argument list?
  - 4) Which English statement best describes what this statement does:
    - Declare a variable
    - Assign a value to a variable
    - Retrieve a value from a variable
    - Create an object
    - Call a method
- 

**Syntax Questions**

- 1) Which of the following is a valid variable declaration for a variable whose type is String and whose name is text?
  - String text;
  - Text.string;
  - string text;
  - new text String();

What is the symbol that Java uses as the assignment operator?

- =
- .
- <
- >

Which of the following expressions assigns the value 5 to the variable num?

- 5 = num;
- num = 5;
- num .assign(5);

### **Arguments**

Parts a – e give method names and the type of values needed for the argument lists of those methods. Select from choices 1-6 to show which values would be appropriate arguments for those methods. If a method does not require arguments, simply write “None needed”. There is potentially more than one correct answer to each part and not all choices will be used.

- |                           |                       |
|---------------------------|-----------------------|
| a) sum (int, int)         | 1. "hello everyone"   |
| b) measurement (double)   | 2. 45.67              |
| c) print (String)         | 3. 35                 |
| d) paint (java.awt.Color) | 4. 68.2               |
| e) forward()              | 5. java.awt.Color.RED |
|                           | 6. new Turtle()       |

### **DrJava Interaction**

The following is a sample output of a DrJava interactions pane session. Your job is to fill in the values of the expressions (blank lines) that would be produced just like DrJava would produce them if you were typing this in interactively.

```
> int x;
> int y = 5;
> x = y - 3;
> x

> int z = x * 5;
> z

> x = x + 2;
> x

> y = x;
> y

> x

> y = y + 5;
> y

> x
```

### **Questions about writing code:**

- 1) Write the Java statement to declare a variable whose name is banana and whose type is Fruit.
- 2) Write the Java statement that assigns the value x + y to a variable named answer.
- 3) Write the Java statement that declares a variable of type Lion, named larry. Then write the Java statement that assigns a new Lion object to that variable. Then, write the Java statement to call the method roar() on the lion object.