Classes, Types, and For Each Loops

Practice Quiz, 5 questions

1 point

1.

Before you can effectively code in Java, you need to be able to understand what your code does. Try to solve the following problems in this quiz by hand!

Consider the following BlueJ program.

```
1  public class Mystery {
2
3    /**
4     * read file of mysterious phrases
5     */
6
7    public void DoSomething() {
8      // initialize instance variables
9      FileResource someFile = FileResource("phrases.txt");
10     for (String phrase : someFile.lines()){
11       System.out.println(phrase);
12     }
13   }
14 }
```

Which one of the following is the name of a method?

- DoSomething
- Mystery
- phrase
- someFile

---

1 point

2.

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Consider the following Java class.

```
1  public class Thing {
2
3    private int a;
4
5    public Thing(int x) {
6      a = x;
7    }
8
9    public int geta() {
10     return a;
11   }
12
13   public void print() {
14     int b = 4;System.out.println(geta() + " " + b);
15   }
16 }
```

What is (or are) the instance variable(s) in this class?

- a and x
- b
- a, x, and b
- x
- a

---

1 point

Consider the following Java class.

```
1  public class Thing {
2
3    private int a;
4
5    public Thing(int x) {
6      a = x;
7    }
8
9    public int geta() {
10     return a;
11   }
12 }
```

And consider the following code segment that uses the class Thing.

```
1  Thing f = new Thing(3);
2  Thing g = new Thing(5);
3  Thing h = f;
4  Thing j = h;
```

3. How many Thing objects are created?

Enter answer here

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1 point

4.

Consider the following Java code segment.

```
1  int m = 7 ;
2  int n = 9 ;
3  double d = 4.5 ;
4  double f = 8.974 ;
```

Which one of the following arithmetic expressions would need a cast for the addition to work? (Hint: Review the video on **Types** if you are unsure what casting variables means.)

- ```
  1  int x = m + n ;
  ```
- ```
  1  double z = m + f ;
  ```
- ```
  1  int y = n + f;
  ```
- ```
  1  double w = d + f ;
  ```

1 point

5.

Consider the Thing class shown below.

```
1  public class Thing {
2
3    private int a;
4
5    public Thing(int x) {
6      a = x;
7    }
8
9    public int geta() {
10     return a ;
11   }
12
13   public void combine (Thing y) {
14     a = a + y.geta();
15   }
16 }
```

And consider the following code segment that uses the Thing class.

```
1  Thing f = new Thing(6);
2  Thing g = new Thing(8);
3  f.combine(g);
4  System.out.println(f.geta());
5  System.out.println(g.geta());
```

What is printed when this code is executed?