1. Which primitive or class would make the DivideByTwo method print the following output, given x = 7.5?

```
public class QuickMaths {
  public static void DivideByTwo(<type> x) {
    System.out.println(x / 2);
  }
}
```

`QuickMaths.DivideByTwo(7.5) == 3.75`
^ (This should be true)

a. `int`
b. `String`
c. `double`
d. `Scanner`

2. An interface is a way to abstractly represent a class so that you can specify how a class should look without writing any logic. To *implement* an interface, you must write a class that has every method defined in the interface.

Write an *implementation* of the following interface:

```
interface IHouse {
  private double cost;
  private String address;
  private int footage;
  private int numRooms;

  public String getFormattedCost(); // i.e. $350,000
  public double getCostAsNumber(); // i.e. 350000
  public String getFormattedFootage(); // i.e. 2000 sq. ft.
  public double getAvgFootagePerRoom();
  public void setCost(double cost);

  House(double cost, String address, int footage, int numRooms);
}
```

```
class House implements IHouse {
  // Your code here!
}
```

3. What is the range of possible values printed by this program?
   (Square brackets mean inclusive, parentheses mean the opposite)

```
public class RandAdd {
  public static void main(String[] args) {
    double a = Math.random() * 10;
    double b = Math.random() * 5 + 5;

    System.out.print(a + b);
  }
}
```

a. [5-20)
b. (5-10)
c. (1-21)
d. (5-25]

4. Which of the following is *not* a primitive in Java?

a. `int`
b. `char`
c. `medium`
d. `byte`

5. Which of the following will return `false` if strings `a` and `b` are equivalent?

a. `a == b`
b. `!(a.compareTo(b) == 0)`
c. `a.equals(b)`
d. `!!a.format(b)`