

Name _____ Period _____

1. Consider the code below. Predict the result of each of the following numeric operations	
<pre>double d1 = 37.9; double d2 = 1004.128; int i1 = 12; int i2 = 18;</pre>	
(a) $57.2 * (i1 / i2) + 1$	
(b) $57.2 * ((double)i1 / i2) + 1$	
(c) $15 - i1 * (d1 * 3) + 4$	
(d) $15 - i1 * ((int)d1 * 3) + 4$	
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A `RandomNumber` class below accepts a positive integer from the user and assigns this value to a variable called `max`. It then creates a random number within a range that spans the negative value of the `max` (inclusive) and the positive value (not inclusive) and prints the result to the console. Consider the following examples,

Run	Output
Java RandomNumber 10	8
Java RandomNumber 5	-3
Java RandomNumber 8	0
Java RandomNumber 11	11

Complete the RandomNumber class below.

```
public class RandomNumber{
    public static void main(String args[]){
        int max = args[0];
```

}

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A `BinaryToDecimal` class below accepts a 3-digit positive binary integer from the user and assigns this value to a variable called `bin`. It then converts the number to its decimal equivalent and stores the result in a variable called `dec`. Consider the following examples,

Run	value of dec
Java BinaryToDecimal 011	3
Java BinaryToDecimal 101	5
Java BinaryToDecimal 111	7
Java BinaryToDecimal 010	2

Complete the `BinaryToDecimal` class below.

```
public class BinaryToDecimal{
    public static void main(String args[]){
        int bin = args[0];

}
}
```

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