

CSE142 Section Handout #5.5 Solutions

1.	Expression	Value
	<code>13 + 2 * 5 / 3</code>	16
	<code>2.5 * 2 * 5 / 10 + 1.5</code>	4.0
	<code>85 % 10 + 4 % 10 - 17 % 3</code>	7
	<code>2 + 3 + "." + (3 + 4) + 2 * 3</code>	"5.76"
	<code>482 / 10 / 5 / 2.0 * 2 + 14 / 5</code>	11.0

2. Parameter Mystery. The program produces the following output.

```
she can't take she with her
it can't take her with you
you can't take it with you
fred can't take her with him
```

3.	Method Call	Output Produced
	<code>ifElseMystery(5, 20);</code>	7 5
	<code>ifElseMystery(42, 42);</code>	43 41
	<code>ifElseMystery(6, 1);</code>	9 7
	<code>ifElseMystery(2, 0);</code>	3 -1
	<code>ifElseMystery(7, 10);</code>	9 7
	<code>ifElseMystery(4, 4);</code>	5 3

4.	Method Call	Output Produced
	<code>mystery(2);</code>	1 2
	<code>mystery(5);</code>	1 5
	<code>mystery(9);</code>	2 3
	<code>mystery(12);</code>	3 3

5.	<code>y == 0</code>	<code>y % 2 == 0</code>	<code>z == 0</code>
Point A	never	always	always
Point B	never	always	sometimes
Point C	sometimes	always	never
Point D	never	never	sometimes
Point E	always	always	sometimes

6. One possible solution appears below.

```
public static void spinWheel(Random r, int n) {
    int spin = r.nextInt(5) * 10 + 20;
    System.out.print("spins: " + spin);
    int count = 0;
    if (spin == 20) {
        count++;
    }
    int totalSpins = 1;
    while (count < n) {
        spin = r.nextInt(5) * 10 + 20;
        totalSpins++;
        System.out.print(", " + spin);
        if (spin == 20) {
            count++;
        } else {
            count = 0;
        }
    }
    System.out.println();
    System.out.println(n + " in a row after " + totalSpins + " spins");
}
```

7. One possible solution appears below.

```
public static boolean balanceCheckbook(Scanner console) {
    System.out.print("initial balance? ");
    double balance = console.nextDouble();
    System.out.print("how many transactions? ");
    int count = console.nextInt();
    double min = balance;
    for (int i = 1; i <= count; i++) {
        System.out.print(i + "/" + count + " amount? ");
        double amount = console.nextDouble();
        balance = balance + amount;
        System.out.println("new balance = $" + balance);
        if (balance < min) {
            min = balance;
        }
    }
    System.out.println("minimum balance = $" + min);
    return (min < 0);
}
```

8. One possible solution appears below.

```
public static boolean sameDashes(String str1, String str2) {
    for (int i = 0; i < str1.length(); i++) {
        if (str1.charAt(i) == '-') {
            if (i >= str2.length() || str2.charAt(i) != '-') {
                return false;
            }
        }
    }
    for (int i = 0; i < str2.length(); i++) {
        if (str2.charAt(i) == '-') {
            if (i >= str1.length() || str1.charAt(i) != '-') {
                return false;
            }
        }
    }
    return true;
}
```