

Problem #1:

Expression	Value
<code>4 * (2 + 4) - 3 * 5</code>	9
<code>54 % 10 + 8 * 3 % 9</code>	10
<code>3 * 2 + 4 + "+" + 2 + 3 * 4</code>	"10+212"
<code>2.3 * 3 + 19 / 5 / 2 + 6.0 / 5</code>	9.1
<code>108 / 20 * 3 / 4 / 2.0 + 1.0 / 2</code>	2.0

Problem #2:

to walk the walk is good
to hear the good is bad
to feel the walk is song
to feel the talk is bad

Problem #3:

Method Call	Output Produced
<code>ifElseMystery(14, 14);</code>	14 13
<code>ifElseMystery(4, 5);</code>	7 5
<code>ifElseMystery(10, 5);</code>	12 10
<code>ifElseMystery(2, 8);</code>	3 8
<code>ifElseMystery(5, 4);</code>	5 9
<code>ifElseMystery(6, 8);</code>	7 8

Problem #4:

Method Call	Output Produced
<code>mystery(8);</code>	1 8
<code>mystery(32);</code>	2 5
<code>mystery(184);</code>	3 13
<code>mystery(8239);</code>	4 22

Problem #5:

	<code>n == 0</code>	<code>n % 2 == 1</code>	<code>x == 0</code>
Point A	sometimes	sometimes	always
Point B	never	sometimes	sometimes
Point C	never	always	never
Point D	sometimes	sometimes	sometimes
Point E	always	never	sometimes

Problem #6

Solution:

```
public static boolean printThreeDigit(Random r, int n) {
    boolean seen = false;
    System.out.print("numbers: ");
    if (n > 0) {
        int number = r.nextInt(900) + 100;
        System.out.print(number);
        if (number == 777) {
            seen = true;
        }

        for (int i = 2; i <= n; i++) {
            number = r.nextInt(900) + 100;
            System.out.print(", " + number);
            if (number == 777) {
                seen = true;
            }
        }
    }

    System.out.println();
    if (seen) {
        System.out.println("We saw a 777");
    } else {
        System.out.println("no 777");
    }

    return seen;
}
```

Problem #7

Solution:

```
public static void findRange(Scanner console) {
    System.out.print("number (0 to quit)? ");
    int number = console.nextInt();
    int max = number;
    int min = number;
    while (number != 0) {
        if (number > max) {
            max = number;
        } else if (number < min) {
            min = number;
        }
        System.out.print("number (0 to quit)? ");
        number = console.nextInt();
    }
    int range = max - min;
    System.out.println("range = " + range);
}
```

Problem #8

Two Possible Solutions:

```
public static void printStripped(String s) {
    boolean inComment = false;
    for (int i = 0; i < s.length(); i++) {
        char next = s.charAt(i);
        if (next == '<') {
            inComment = true;
        } else if (inComment && next == '>') {
            inComment = false;
        } else if (!inComment) {
            System.out.print(next);
        }
    }
    System.out.println();
}

public static void printStripped(String s) {
    int start = s.indexOf('<');
    while (start != -1) {
        int stop = s.indexOf('>', start + 1);
        s = s.substring(0, start) + s.substring(stop + 1);
        start = s.indexOf('<');
    }
    System.out.println(s);
}
```