

## CSE 143X Section Handout #1 Solutions

1.

```
public class Mantra {
    public static void main(String[] args) {
        System.out.println("There's one thing every coder must understand:");
        System.out.println("The System.out.println command.");
        System.out.println();
        System.out.println("There's one thing every coder must understand:");
        System.out.println("The System.out.println command.");
    }
}
```

2.

Dear "DoubleSlash" magazine,

Your publication confuses me. Is it  
a \\ slash or a //// slash?

Sincerely,  
Susan "Suzy" Smith

3.

```
public class Difference {
    public static void main(String[] args) {
        System.out.println("What is the difference between");
        System.out.println("a ' and a \"? Or between a \" and a \\\"?");
        System.out.println();
        System.out.println("One is what we see when we're typing our program.");
        System.out.println("The other is what appears on the \"console.\"");
    }
}
```

4.

```
I am method 1.
I am method 1.
I am method 2.
I am method 3.
I am method 1.
I am method 1.
I am method 2.
I am method 1.
I am method 2.
I am method 2.
I am method 3.
I am method 1.
```

5.

```
public class Mantra {
    public static void main(String[] args) {
        message();
        System.out.println();
        message();
    }

    public static void message() {
        System.out.println("There's one thing every coder must understand:");
        System.out.println("The System.out.println command.");
    }
}
```

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6.

```
public class StarFigures {
    public static void main(String[] args) {
        figure1();
        System.out.println();
        figure2();
        System.out.println();
        figure3();
    }

    public static void figure1() {
        horizontalBar();
        printX();
    }

    public static void figure2() {
        figure1();
        horizontalBar();
    }

    public static void figure3() {
        System.out.println(" *");
        System.out.println(" *");
        System.out.println(" *");
        figure1();
    }

    public static void horizontalBar() {
        System.out.println("*****");
        System.out.println("*****");
    }

    public static void printX() {
        System.out.println(" * *");
        System.out.println(" *");
        System.out.println(" * *");
    }
}
```

7.

Expression	Value	Expression	Value
$4 * 3/8 + 2.5 * 2$	6.0	$(2.5 + 3.5)/2$	3.0
$26 \% 10 \% 4 * 3$	6	$9/4 * 2.0 - 5/4$	3.0
$(5 * 7.0/2 - 2.5)/5 * 2$	6.0	$3 * 4 + 2 * 3$	18
$12/7 * 4.4 * 2/4$	2.2	$177 \% 100 \% 10/2$	3
"hello 34 " + 2 * 4	"hello 34 8"	$9/2.0 + 7/3 - 3.0/2$	5.0
"2 + 2 " + 3 + 4	"2 + 2 34"	$813 \% 100/3 + 2.4$	6.4
$3 + 4 + " 2 + 2"$	"7 2 + 2"	$27/2/2.0 * (4.3 + 1.7) - 8/3$	37.0
$41 \% 7 * 3/5 + 5/2 * 2.5$	8.0	$89 \% (5 + 5) \% 5$	4
$22 + 4 * 2$	30	$4.0/2 * 9/2$	9.0
$10.0/2/4$	1.25	$392/10 \% 10/2$	4
$23 \% 8 \% 3$	1	$53/5/(0.6 + 1.4)/2 + 13/2$	8.5
$17 \% 10/4$	1	$8 * 2 - 7/4$	15
$8/5 + 13/2/3.0$	3.0	$37 \% 20 \% 3 * 4$	8
$12 - 2 - 3$	7	$2.5 * 2 + 8/5.0 + 10/3$	9.6
$6/2 + 7/3$	5	$2 * 3/4 * 2/4.0 + 4.5 - 1$	4.0
$6 * 7\%4$	2	$89 \% 10/4 * 2.0/5 +$ $(1.5 + 1.0/2) * 2$	4.8

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8.

```
      *
     ***
    *****
   *********
  ***********
 *****
*****
*****
*****
*****
*****
*****
*****
```

9.

```
public static void drawFigure() {
    for (int line = 1; line <= 5; line++) {
        for (int i = 1; i <= -4 * line + 20; i++) {
            System.out.print("/");
        }
        for (int i = 1; i <= 8 * line - 8; i++) {
            System.out.print("*");
        }
        for (int i = 1; i <= -4 * line + 20; i++) {
            System.out.print("\\");
        }
        System.out.println();
    }
}
```