CSC 108   Quiz # 1   Name _____

Multiple Choice: /* 1 point */

_____ 1. JR has typed the code below. It's not producing the output he wants, which is a green rectangle with a white border on a red background. How should he change his code to get his desired results? The color triple for red is (255, 0, 0), and the color triple for green is (0, 255, 0).

```
size (300, 300);
background(255, 0, 0);
fill(0, 255, 0);
stroke(0, 255, 0);
rect(100, 200, 50, 25);
```

A) change the last line to ellipse (80, 80, 70, 60);   C) change the second line to fill(0, 0, 255);
B) change the first line to background(0, 255, 0);   D) change the third line to stroke(255, 255, 255);
                                                                                E) none of these is an accurate description

Short Answer:

1. Type this code in Processing and run the program. Explain, line by line, what Processing is doing: /* 7 points */

```
int kilometers = 2; _____

int decameters = 0; _____

int meters = 5;_____

print("2 kilometers, 0 decameters, 5 meters = "); _____

meters = meters + 10*decameters + 1000*kilometers; _____

print(meters);_____

println(" meters."); _____
```

2. Suppose x has the value 17 and y has the value 31. Give statements that would produce the following output. You MUST use variables in your answer! /* 3 points */

```
x = 17 and y = 31
```

3. Suppose x has the value 17 and y has the value 31. Give statements that would produce the following output. You MUST use variables in your answer! /* 3 points */

```
31
17
```

4. Explain, line by line, what Processing is doing in the following code: /* 4 points */

```
size(400, 400); _____
noFill(); _____
rect(100, 100, 100, 100); _____
rect(100, 100, 50, 50); _____
```

Short Answer (continued):

5. Fill in the blanks in this program so that it converts the given number of inches into feet correctly and prints the answer in the Console. /* 4 points */ Hint: there are 12 inches in a foot – so if we have 24 inches that should be converted into 2 feet.

```
float inches = 50;
float feet;

feet=_____  ;

print("50 inches = ");

print( feet );

println("_____");
```

6. Complete this Processing statement so that it calculates the half of the difference of the values stored in variables `mouseX` and `circleCenterX`. /* 3 points */

```
halfTheDiff = _____  ;
```