Programming and Electronics Midterm Quiz:::

NAME:

1. What do variables do? Give four examples of different variable types.

2. Where are global variables placed vs. local variables?

3. What is the structure of a conditional statement?

4. What would a conditional statement look like if you were looking to execute certain statements while the values of x fell between 100 and 200? Use a boolean expression.

5. What is the structure of a for loop?

6. What does this code draw?

```
int x = 0;
background(0, 255, 0);
noStroke();

for (int i = 51; i <= 255; i += 51) {
    fill(0, i);

    rect(x, 20, 20, 60);
    x += 20;
}
```

7. What are all the values assigned to *y* in this code (what will println() print)?

```
for(int y = 0; y<=100; y+=20){
    line(0, y, width,y);
    println(y);
}
```

8. What is the code for this sketch if size(200,200)?