

**Multiple Choice:** /\* 2 points each \*/

\_\_\_\_\_ 1. In this function definition, what is the parameter?

```
void rollDice(int numSides) {  
    int d = 1 + int(random(numSides));  
    println("Rolling... " + d);  
}
```

- |             |                  |
|-------------|------------------|
| A) void     | C) numSides      |
| B) rollDice | D) d             |
|             | E) None of these |

\_\_\_\_\_ 2. In this function definition, what is the return type?

```
void rollDice(int numSides) {  
    int d = 1 + int(random(numSides));  
    println("Rolling... " + d);  
}
```

- |             |                  |
|-------------|------------------|
| A) void     | C) numSides      |
| B) rollDice | D) d             |
|             | E) None of these |

**Short Answer:**

1. Explain, on each numbered line, what Processing is doing in the following code. /\*7 points\*/

```
void setup() {  
    float yourWeight = 132; ____[1]____  
    float marsWeight = calculateMars(yourWeight); ____[2]____  
    println(marsWeight); ____[3]____  
}
```

```
float calculateMars(float w) { ____[4]____  
    float newWeight = w * 0.38; ____[5]____  
    return newWeight; ____[6]____  
}
```

*Short Answer (continued):*

2. Explain, on each numbered line, what Processing is doing in the following code. /\*9 points\*/

```
void setup() {  
  size(480, 120);  
  fill(255); ____[1]____  
  drawSquare(0, 0, 120); ____[2]____  
  drawSquare(420, 60, 60); ____[3]____  
}  
  
void drawSquare(int x, int y, int size) { ____[4]____  
  stroke(0); ____[5]____  
  rect(x, y, size, size); ____[6]____  
}
```

3. Write a Processing program (sized 400x600) that uses the drawSquare function above to draw two **blue** squares with the following specifications: /\*5 points\*/

- The first square should start at (60, 40) and have a width and height of 30.
- The second square should start at (120, 160) and have a width and height of 50.