CSC 108 Quiz # 4 Name _____

Multiple Choice: /* 2 points each */

1. In this Processing statement, what does the parameter `130` refer to?

```
image(img1, 130, 0, 240, 120);
```

A) The image itself
B) The width of the image
C) The x-coordinate of the image
D) The height of the image
E) The y-coordinate of the image
F) None of these

2. What code would cause Processing to run one frame every 2 seconds?

A) `frameRate(0.5);`
B) `frameRate(120);`
C) `frameRate(2);`
D) `frameRate(30);`
E) `None of these`

Short Answer:

1. The box below represents the output window for a Processing program. Draw a rectangle inside the box that shows the location, the width and the height of the image displayed by the following Processing code: /* 7 points */

```
size( 500, 120 );
image( img1, 250, 100, 250, 20 );
```

2. Describe in English what happens when the following program is executed, and the timing of what happens: /* 7 points */

```
void draw() {
    background(0);
    int currentTime = millis();
    stroke(255);

    if ( currentTime < 2000 ) {
        background( 0 );
        line( 100, 100, 0, 0 );
    }
    else if ( currentTime < 4000 ) {
        background( 0 );
        line( 100, 100, width, height );
    }
    else if ( currentTime < 6000 ) {
        background( 0 );
        ellipse( 50, 50, 50, 50 );
    }
}
```

Short Answer (continued):

Fill in the blanks in this Processing code so that it flips a coin 500 times and counts how many heads and how many tails were flipped. /* 7 points */

```
int numHeads = 0;
int numTails = 0;
for ( int flipNum = ______ ; _______________ ; flipNum = _________) {
   float percentage = random( 0, 100 );

   if ( percentage < _____ ) {
        numHeads = numHeads + 1;
   }
   else {
        numTails = numTails + 1;
   }
}
print( “heads = “ );
println( numHeads );
print( “tails = “ );
println( numTails);
```