

**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 );
```



*Short Answer (continued):*

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 );
  }
}
```

3. 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 );
```