

Multiple Choice: /* 4 points each */

_____ 1. Assume an array named `values` is declared and instantiated with the following statement:

```
float[] values = new float[300];
```

What is the subscript number (also called the index number) of the first element in the array?

- A) 0 B) 1 C) 299 D) 300 E) 301

_____ 2. Assume an array named `values` is declared and instantiated with the following statement:

```
float[] values = new float[300];
```

What is the subscript number (also called the index number) of the last element in the array?

- A) 0 B) 1 C) 299 D) 300 E) 301

Short Answer:

1. What would be printed by the following Processing code? /* 7 points */

```
int[] x = new int[4];
x[0] = 83;
x[1] = 59;
x[2] = 88;
x[3] = 72;
println( x[2] );
println( x[0] );
println( x[2 + 1] );
println( x[2] + 1 );
```

2. What is printed by the following code? /* 5 points */

```
int[] num = new int[5];
for (int i = 0; i <= 4; i++) {
    num[i] = i*20;
}
for (int k = 4; k >= 0; k--) {
    println( num[k] );
}
```

3. Draw a picture of what would be drawn in a 300 x 300 output window by the following code: /* 5 points */

```
int[] x = new int[3];
int[] y = new int[3];
x[0] = 0;
x[1] = 300;
x[2] = 150;
y[0] = 150;
y[1] = x[0];
y[2] = y[0];

line( x[0], y[0], x[1], y[1] );
line( x[1], y[1], x[2], y[2] );
line( x[2], y[2], x[0], y[0] );
```

