

Name: _____

EE435 Spring 2012 Quiz 4

1. Describe what is meant by the terms *spatial* and *intensity* resolution.

Spatial resolution:

Intensity resolution:

2. Suppose you're filtering a grayscale image with a 3x3 median filter, and the current neighborhood values are:

4	0	10
12	1	200
55	0	234

What is the output value? Show any work.

3. How big is the neighborhood size for intensity transforms?
4. Suppose you have a grayscale image (call it "a") whose values run from 0 to 25. What is the difference you would expect to see between the following two commands:

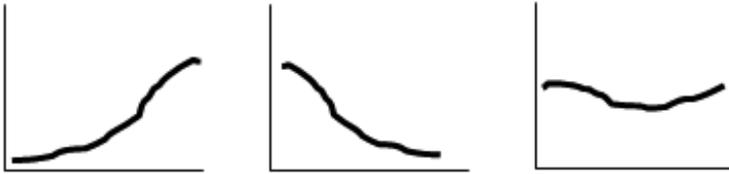
```
>> imshow(a)
```

```
>> imshow(a,[ ])
```

5. What does thresholding do to a grayscale image?

6. What is the goal of histogram equalization?

7. Which shape below would you expect to be the shape of the histogram of the image to the right **and** why?



Bonus: Category Sports... The famous actor Mike Tyson (from the movie *The Hangover* and others) had a taste for ears. Whose ear did he bite a piece off in a Heavyweight Championship boxing match?

