



Photo Fixes

New life for old images

Name(s) _____

Date _____

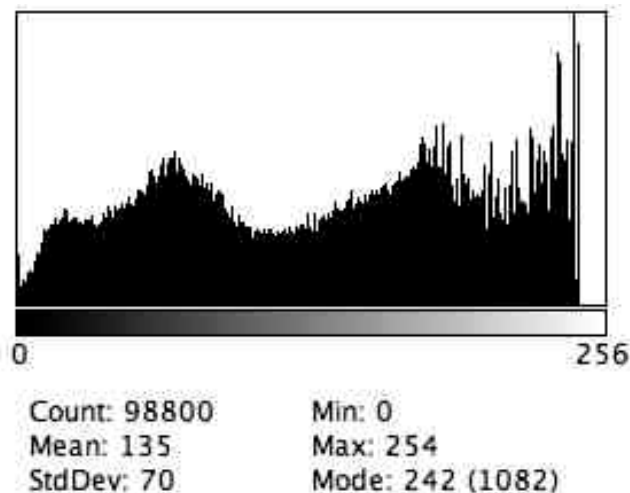
Instructor/Class _____

Please answer the following questions.

1. What do they all have in common?
 - It's hard to see the details.
 - They're faded.
 - They're not very sharp.

2. What is the range of values you see in this image? (Hint: Be sure to look at Uncle Frank's collar, and the shadow of his neck.)
 - Approximately 50-120.
 - Approximately 0-50.
 - Approximately 50-183.

3. Read the labels on this histogram. Then go to the following page, and choose the words that make the sentence correct.



This image has a total of 98,800 pixels; the maximum pixel value in this histogram is _____, and the minimum is _____.

4. On your Data Sheet, draw the histogram you would predict for Faded Uncle Frank.

In addition, pick the correct answer:

A histogram for **FadedFrank.gif** would have

- no values at all
- values spread out all the way across the graph
- values all clustered toward the middle

5. Choose the words that make the sentence correct:

The maximum pixel value in this histogram is _____, and the minimum is _____.

6. Choose the words that make the sentence true:

The minimum value is now _____, the maximum value is _____, and the image became _____.

7. What mathematical function will allow you to bring the maximum closer to 255 without altering pixels that have a value of 0?

- addition
- subtraction
- multiplication
- division

8. Choose the words that make the sentence true:

The minimum value is now _____, the maximum is _____, and the image became _____.

9. What are the advantages of using the histogram to enhance the image?

- It spreads out the pixel values so that they cover the whole available range.
- Using the Contrast button only affects the image temporarily, while using image arithmetic actually changes the pixel values.
- Using image arithmetic only makes the photo darker.

10. Choose the words or phrases that make the sentence correct:

Of the two images, _____ looks better after applying image arithmetic because it has _____ to work with.

11. How effective will the image arithmetic technique be on this photo?

- Using image arithmetic will improve this image because of the large number of bright pixels.
- Using image arithmetic will improve this image because the values are spread across the histogram.
- Using image arithmetic will not improve this image because a nearly full range of values is already represented.