

Name: \_\_\_\_\_

HW# \_\_\_\_\_

### Box and Whisker Plots

1. The test scores from Mrs. Smith's math class are shown below. Construct a box-and-whisker plot.

72, 73, 66, 71, 82, 85, 95, 85, 86, 89, 91, 92

Lower Extreme:

Lower Quartile (Q1):

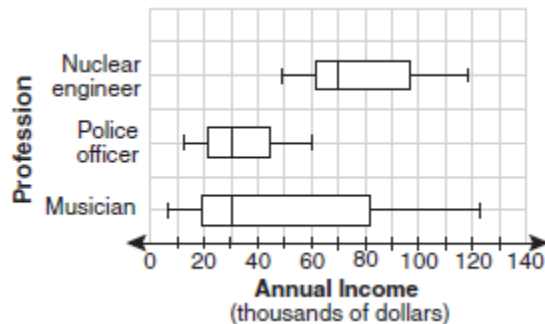
Median (Q2):

Upper Quartile (Q3):

Upper Extreme:



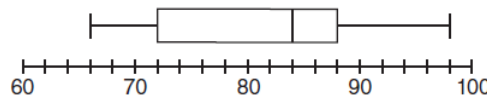
2. The accompanying box-and-whisker plots can be used to compare the annual incomes of three professions. Based on the box-and-whisker plots, which statement is true?



- 1) The median income for nuclear engineers is greater than the income of all musicians.
- 2) The median income for police officers and musicians is the same.
- 3) All nuclear engineers earn more than all police officers.
- 4) A musician will eventually earn more than a police officer.

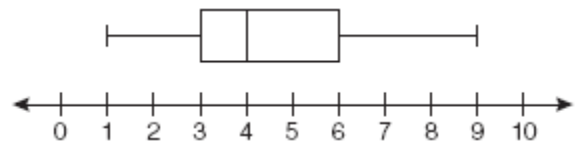
3. The box-and-whisker plot below represents the math test scores of 20 students. What percentage of the test scores are *less than 72*?

- 1) 25
- 2) 50
- 3) 75
- 4) 100



4. Roslyn movie theater recorded the number of tickets sold daily for a popular movie during the month of May. The box-and-whisker plot shown below represents the data for the number of tickets sold, **in hundreds**. Which conclusion can be made using this plot?

- 1) The second quartile is 600.
- 2) The mean of the attendance is 400.
- 3) The range of the attendance is 300 to 600.
- 4) Twenty-five percent of the attendance is between 300 and 400.



5. The accompanying box-and-whisker plot represents the scores earned on a science test.

- a) What is the median score?
- b) What is the minimum value?
- c) What is the maximum value?
- d) What is the lower quartile?
- e) What is the upper quartile?
- f) What percent of data lies between 70 and 85?
- g) Which value represents the 75<sup>th</sup> percentile?

