

Math 206 - Quiz 5

February 25, 2015

Name key

Score _____

Show all work to receive full credit. Supply explanations when necessary.

1. (3 points) A local small business employs 15 people. 13 employees have a salary of \$32,000 each, 1 employee has a salary of \$98,000, and 1 employee has a salary of \$250,000. Compute the mean, median, and mode of the salaries. Which is the best measure of center and why?

$$\frac{13(32) + 98 + 250}{15} = \frac{764}{15} = 50.9\bar{3}$$

$$\text{MEAN} = \$50,933.33$$

$$\text{MEDIAN} = \$32,000.00$$

$$\text{MODE} = \$32,000.00$$

BECAUSE ALMOST ALL
EMPLOYEES MAKE \$32,000,
THIS AMOUNT (MODE = MEDIAN)
IS THE BEST MEASURE OF
CENTER. THE MEAN IS NOT SO
GOOD BECAUSE OF THE EFFECT OF

2. (2 points) Some teens and adults were asked how much cash they were carrying. 15 teens were carrying a mean amount of \$9.75, and 25 adults were carrying a mean amount of \$28.15. What was the mean amount carried by all 40 people?

THE
EXTREME
VALUES.

$$\frac{15(9.75) + 25(28.15)}{40} = \$21.25$$