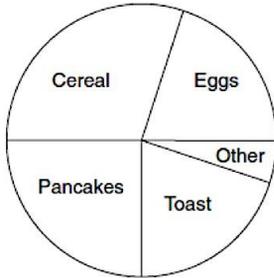


Get a parent signature for +2% on your test! Parent: \_\_\_\_\_

- 1) The circle graph shows the results of a survey of 240 people who were asked about their favorite breakfast food. About how many people answered toast?

**Favorite Breakfast Foods**



- 2)

Stem	Leaf
6	2 3
7	4 4 8 9
8	3 6
9	1 1 1 2 3

Mode

Median

**A**

**B**

6|2 represents 62

Based on this stem and leaf plot, which statement is true?

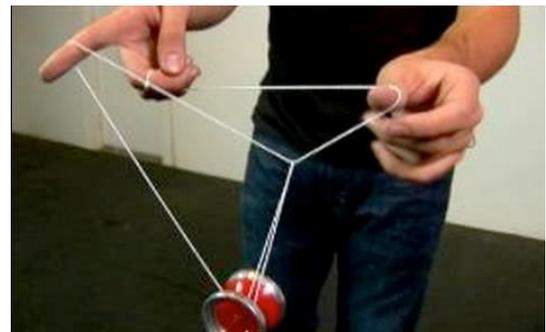
- (A) A is greater than B.
- (B) B is greater than A.
- (C) A and B are equal.
- (D) There is not enough information to tell which is greater.

- 3)

**SAT test question**

The average of a set of 8 consecutive odd integers is 18. What is the greatest of these 8 integers?

- 4) Ten friends have an average of 3 yo-yos each. Shimon joins them and now the mean is 4 yo-yos each. How many yo-yos does Shimon have?



5) Sophia surveyed 5 of her friends to find out how much each earned by tutoring last month.

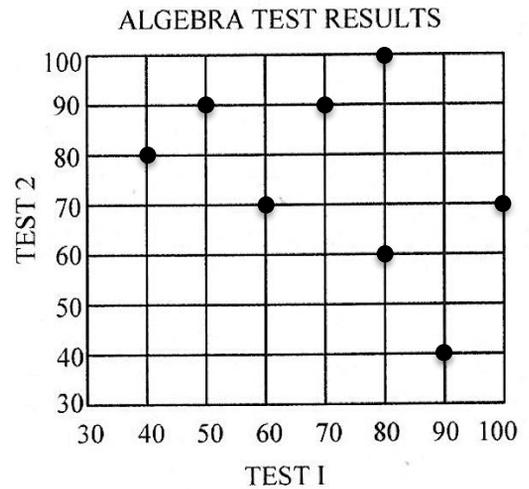
Use the clues provided to find the 5 amounts earned.

- The median is the most appropriate measure to use to describe the responses.
- There is no mode.
- The sum of the 5 amounts is \$250.
- The mean is \$20 more than the median.
- The person who earned the most made \$140 more than the person who earned the least.
- All of the responses are multiples of 10.

6) **SAT test question**

The scatterplot shows the results of eight students on their last two algebra tests. Which of the following is the greatest change in scores from Test 1 to Test 2?

- A) 60
- B) 50
- C) 40
- D) 30
- E) 20



7) Jonathan takes 5 tests. Each score is a whole number between 0 and 100, inclusive. The following statements are true:

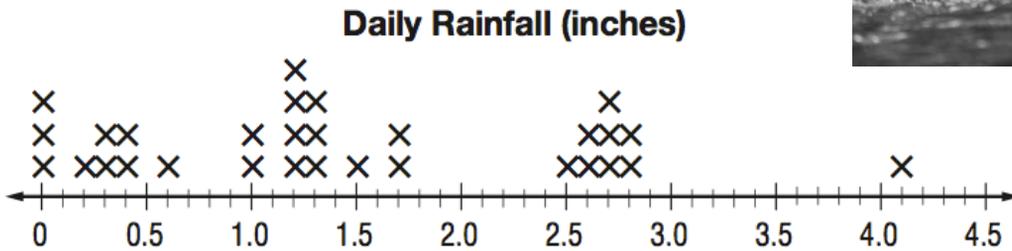
- I) The mean of his scores is 80,
- II) the median is 81, and
- III) there is just one mode and it is 88.

Find the least possible score Jonathan could have received on any one test.

8) Five integers have a sum of 135. One extra number is added to the original five numbers. The mean of the six numbers is  $26\frac{1}{6}$ . Which of the following **must** be true about the sixth number?

- A) It is less than each of the other five numbers
- B) It is greater than each of the other five numbers
- C) It is an odd number
- D) It is an even number

9) Use the line plot to answer the questions below.

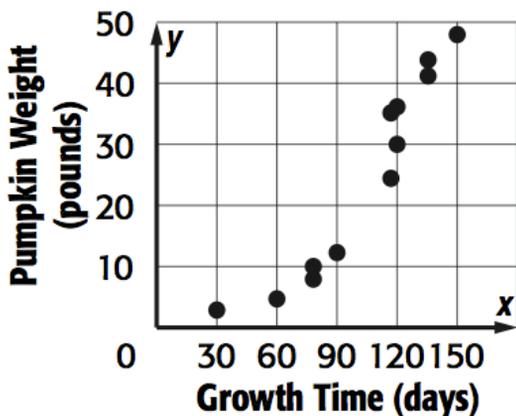


What was the range of rainfall?

On how many days did it rain more than 1.0 inches?

10) If all values in a data set are decreased by 3, which measure(s) of the data **must** be affected? (mean, median, mode, range).

11) Analyze the scatter plot below, then describe the correlation, if any, between pumpkin weight and growth time.



12) Sachin has a summer job mowing lawns. The following amounts represent his earnings for mowing 5 lawns: \$22, \$25, \$20, \$18, \$25.

Which measure is NOT represented by \$22, the mean, median, or mode?

If Sachin mowed two more lawns and earned \$14 and \$23, which measure would change, the mean, median, or mode? What would it change to?

13) How many quarters (worth 25 cents each) must be added to 12 nickels (worth 5 cents each), so that the average value of a coin in the new enlarged collection is 10 cents?

14) **SAT test question**

This frequency table shows the number of students and their scores on a math test. If the median of the test is 75, which of the following could be the value of  $n$ ?

- A) 8
- B) 7
- C) 6
- D) 5
- E) 4

Scores	Number of Students
100	2
90	4
80	6
70	$n$
60	5
50	1

15) Athena's number is the average of  $\frac{1}{3}$  and  $\frac{1}{2}$ . Claudia's number is the average of Athena's number and  $\frac{1}{2}$ . What is Claudia's number?