#### MEAN, MEDIAN, MODE, AND RANGE Cheat Sheet

#### **MEAN**

Also known as AVERAGE.

Say this in a "MEAN" voice:

- 1. ADD
- 2. COUNT
- 3. DIVIDE

#### This means:

- 1. ADD all the numbers together.
- 2. COUNT how many numbers you added together.
- 3. DIVIDE the total of the numbers you ADDED (step 1) by the amount of numbers you COUNTED (step 2).

#### Example:

94, 81, 95, 86, 82, 90, 95

- 1. ADD the numbers together: 94 + 81 + 95 + 86 + 82 + 90 + 96 = 623
- 2. COUNT how many numbers you added together:

| 94 | 81 | 95 | 86 | 82 | 90 | 95 |
|----|----|----|----|----|----|----|
| 1  | 2  | 3  | 4  | 5  | 6  | 7  |

You added 7 numbers together.

3. DIVIDE the total of the numbers you ADDED (623) by the amount of the numbers you COUNTED (7):

$$623 \div 7 = 89$$

The MEAN (average) is 89.

#### **MEDIAN**

Say this tongue twister three times quickly to remember:

Median middle, median middle, median middle.

- 1. Put all the numbers in order from least to greatest.
- 2. Cross off one number from each end until you are left with the number in the middle.
- 3. If you end up with two numbers in the middle, find the mean of those two numbers.

#### Example:

94, 81, 95, 86, 82, 90, 95

- 1. Put the numbers in order from least to greatest: 81, 82, 86, 90, 94, 95, 95
- 2. Cross off one number from each end until you are left with the number in the middle:

The number left in the middle is the median.

The **MEDIAN** is **90.** 

Here is an example where two numbers are left in the middle:

Find the mean of the two numbers left in the middle by adding them together and dividing by 2.

$$90 + 94 = 184$$
  
 $184 \div 2 = 92$ 

The **MEDIAN** is **92**.

#### MODE

Say this tongue twister three times quickly to remember:

Mode most, mode most, mode most, it's not the biggest, it's there the most!

- 1. Look at each number.
- 2. Count how many times it shows up in the list of numbers.
- 3. The one that shows up the most is the mode.

#### Example:

94, 81, 95, 86, 82, 90, 95

Look at each number and count how many times it shows up in the list of numbers.

| 94 | 81 | 95 | 86 | 82 | 90 |
|----|----|----|----|----|----|
| 1  | 1  | 2  | 1  | 1  | 1  |

94, 81, 86, 82, and 90 all show up one time, but 95 shows up twice.

Since 95 is there the most, it is the mode.

The MODE is 95.

#### **RANGE**

Say this and make up some hand movements to go with it to remember:

Range: You take the biggest and the smallest and subtract!

- 1. Find the biggest number in the list.
- 2. Find the smallest number in the list.
- 3. Subtract them to find the range.

Example:

94, 81, 95, 86, 82, 90, 95

- 1. The biggest number in the list is **95**.
- 2. The smallest number in the list is **81**.
- 3. Subtract the numbers:

95 - 81 = 14

The **RANGE** is **14**.

MEAN, MEDIAN, MODE & RANGE

Skill: Averages / Mean

# **Finding Averages**

Find the averages. Show your work and write your answer on the line.

**a.** 4, 3, 8, 5 avg: \_\_\_\_\_ **b.** 9, 2, 7

avg: \_\_\_\_\_

**c.** 2, 0, 5, 1, 2 avg: \_\_\_\_\_ **d.** 12, 12, 6, 6 avg: \_\_\_\_\_

**e.** 7, 4, 11, 6 avg: \_\_\_\_\_

f. 16, 2

avg: \_\_\_\_\_

**g.** 6, 2, 2, 12, 3 avg: \_\_\_\_\_

**h.** 9, 17, 1 avg: \_\_\_\_\_

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

### Mean, Median, Mode, and Range

Find the mean, median, mode, and range for each set of numbers.

2 1 1 5 6

median - \_\_\_\_\_

range -

mode -

mean - \_\_\_\_\_

7 | 7 | 0 | 14 | 0 | 7 | 14

median -

range - \_\_\_\_\_

mode - \_\_\_\_\_

mean -

3 | 12 | 18 | 12 | 7 | 12 | 6

median - \_\_\_\_\_

mode - \_\_\_\_\_

range -

mean - \_\_\_\_\_

### Mean, Median, Mode, and Range

Find the mean, median, mode, and range for each set of numbers.

**a.** 3, 4, 9, 7, 7

mean: \_\_\_\_

**b.** 15, 3, 3

mean: \_\_\_\_\_

median: \_\_\_\_\_

median: \_\_\_\_\_

mode: \_\_\_\_\_

mode: \_\_\_\_\_

range:\_\_\_\_\_

range: \_\_\_\_\_

**c.** 3, 0, 0, 2, 0

mean: \_\_\_\_\_

**d.** 5, 6, 5, 2, 4, 5, 1

mean: \_\_\_\_\_

median: \_\_\_\_\_

median: \_\_\_\_\_

mode: \_\_\_\_\_

mode: \_\_\_\_\_

range:\_\_\_\_\_

range: \_\_\_\_\_

**e.** 10, 6, 3, 10, 1

mean: \_\_\_\_\_

**f.** 4, 6, 2, 6, 9, 3, 5

mean: \_\_\_\_\_

median: \_\_\_\_\_

median: \_\_\_\_\_

mode: \_\_\_\_\_

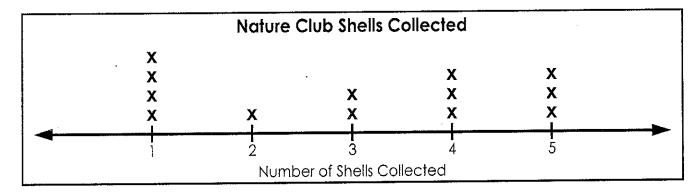
mode: \_\_\_\_\_

range: \_\_\_\_\_

range: \_\_\_\_\_

## Line Plot: Median, Mean, Mode, and Range

The nature club at Westville Middle School went on a field trip to the seashore. Each member collected seashells to put on display at the school. The line plot below shows how many shells each club member collected.



- 1. What is the median number of shells collected?
- 2. What is the mode?
- 3. What is the range?
- 4. How many shells were collected in all?
- 5. What is the mean, or average, number of shells collected?