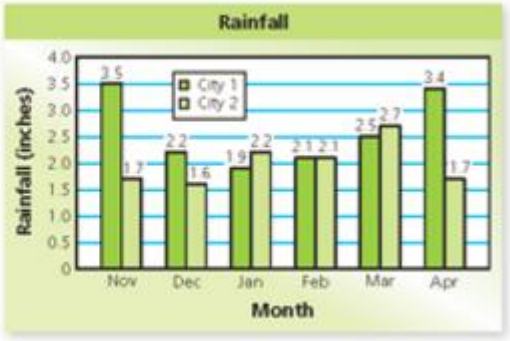
Cornell Notes

Topic: **Mean Lesson 9.2**

Name: _____
Date: _____
Period: _____

Essential Question: How can you find an average value of a data set?

Questions/Main Ideas:	Notes:
Vocabulary	**Mean**- finding the average of a set of numbers
	(Add up all the numbers and divide by how many numbers you added together.)
Example 1	**Finding the Mean**
	The table shows the number of text messages sent by a group of friends over 1 week. What is the mean number of messages sent? (A) 100 (B) 102 (C) 103 (D) 104 $\text{mean} = \frac{120 + 95 + 101 + 125 + 82 + 108 + 90}{7}$ ← Sum of the data; ← Number of values
Example 2	**Comparing Means**
	The double bar graph shows the monthly rainfall amounts for two cities over a six-month period. Compare the mean monthly rainfalls. 
	City 1 mean: $\frac{3.5 + 2.2 + 1.9 + 2.1 + 2.5 + 3.4}{6} =$ City 2 mean: $\frac{1.7 + 1.6 + 2.2 + 2.1 + 2.7 + 1.7}{6} =$

Example 3	Finding the Mean WITH and WITHOUT an Outlier

Shetland Pony Heights (inches)				
40	37	39	40	42
38	38	37	28	40

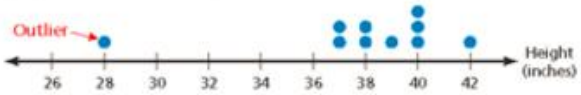
The table shows the heights of several Shetland ponies.

a. Identify the outlier.

b. Find the mean with and without the outlier.

c. Describe how the outlier affects the mean.

a. Display the data in a dot plot.



The height of 28 inches is much less than the other heights. So, it is an outlier.

b. **Mean with outlier:**

$$\frac{40 + 37 + 39 + 40 + 42 + 38 + 38 + 37 + 28 + 40}{10} =$$

Mean without outlier:

$$\frac{40 + 37 + 39 + 40 + 42 + 38 + 38 + 37 + 40}{9} =$$

Summary: **Students should write a summary reflecting the above essential question.**
