

## 12.3 Comparing Data Sets

Math 7

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

**CA #1**

Bob collects data on how many hours students spend on the internet and on exercise. Find the SOCS and then use the statistics to compare internet and exercise.

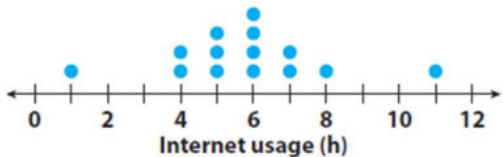
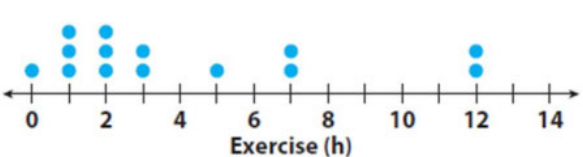
	<p>Internet usage (h)</p>	<p>Exercise (h)</p>
<b>Shape</b>		
<b>Outliers</b>		
<b>Center</b>	Mean =  Median =  Mode =	Mean =  Median =  Mode =
<b>Spread</b>	Range =  MAD =	Range =  MAD =

1. Is the mean higher for internet or exercise?
2. Which has more variability?
3. Do students internet or exercise more? Explain using statistics.

(answers on back!)

# ANSWERS TO CORRECTIVE ASSIGNMENT!

Bob collects data on how many hours students spend on the internet and on exercise. Find the SOCS and then use the statistics to compare internet and exercise.

	 <p>Internet usage (h)</p>	 <p>Exercise (h)</p>
Shape	NORMAL	No specific pattern
Outliers	1 and 11	None
Center	Mean = 5.79 Median = 6 Mode = 6	Mean = $4.\bar{3}$ Median = 2 Mode = 1 and 2
Spread	Range = 10 MAD = 1.53	Range = 12 MAD = $3.\bar{5}$

1. Is the mean higher for internet or exercise?

The mean for internet is higher. 5.79 hours compared to 4.3 hours.

2. Which has more variability?

Exercise has more variability. The range is 12 hours compared to 10 and the MAD is 3.5 compared to 1.53.

3. Do students internet or exercise more? Explain using statistics.

Students spend more time on the internet compared to exercise. The average time on internet is higher than average time spent on exercise. Internet times is clustered around 4-8 hours while the time on exercise is more spread out with a smaller cluster around 1-4 hours.