

YOUR TURN

3. Two aspirin-making devices are set to make tablets containing 0.35 gram of aspirin. The actual amounts in 8 tablets from each device are shown. Use a spreadsheet to determine which device has less variability.

Amounts of Aspirin in Tablets Made by Device A (g)							
0.353	0.351	0.350	0.352	0.349	0.348	0.350	0.346

Amounts of Aspirin in Tablets Made by Device B (g)							
0.349	0.341	0.347	0.358	0.359	0.354	0.339	0.343



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Guided Practice

HW # 59 1-8

1. A bus route takes about 45 minutes. The company's goal is a MAD of less than 0.5 minute. One driver's times for 9 runs of the route are shown. Did the bus driver meet the goal? (Explore Activity and Example 1)

Times to Complete Bus Route (min)								
44.2	44.9	46.1	45.8	44.7	45.2	45.1	45.3	44.6

- a. Calculate the mean of the bus times. _____
- b. Calculate the MAD to the nearest tenth. _____

The bus driver **did / did not** meet the company's goal.

2. Below are a different driver's times on the same route. Find the mean and the MAD using a spreadsheet. Enter the data values into row 1 using cells A to I. Enter "mean =" into cell A2 and "MAD =" into cell A3. (Example 2)

Times to Complete Bus Route (min)								
44.4	43.8	45.6	45.9	44.1	45.6	44.0	44.9	45.8

The mean is _____ minutes, and the MAD is _____ minutes.

This time, the bus driver **did / did not** meet the company's goal.




ESSENTIAL QUESTION

3. What is the mean absolute deviation and what does it tell you about data sets?

16.2 Independent Practice

CA CC 6.SP.5c



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Frank wants to know how many people live in each household in his town. He conducts a random survey of 10 people and asks how many people live in their household. His results are shown in the table.

Number of People per Household									
1	6	2	4	4	3	5	5	2	8

- Calculate the mean number of people per household. _____
- Calculate the MAD of the number of people per household. _____
- What conclusions can you draw about the "typical" number of people in each household? Explain.

Each yogurt treat served at a shop must be the same size. A new worker spends his first week on the job learning to serve the correct amount. The tables show the sizes of 10 yogurt treats the worker served at the beginning of his first week, and of 10 yogurt treats he served at the end of his first week.

Serving Sizes, in Grams, at Beginning of Week 1									
76	81	85	79	89	86	84	80	88	79

Serving Sizes, in Grams, at End of Week 1									
79	82	84	81	77	85	82	80	78	83

- Calculate the MADs for the two tables. Did the worker's ability to serve same-sized yogurt treats improve? Explain.

- What if?** What would it mean if the serving sizes had a MAD of 0?
