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Math 3 / One-Variable Data / Describing Center

How many hours a week do you work? Part 2.


How many hours a week do seniors in Michigan work during the school year? We will use this class as a sample of all students in Michigan.

1. Record the data for the class here.

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2. Go to www.stapplet.com. Enter the classroom data and create a dot plot for our classroom data. Copy below.
3. In the applet, look below the dotplot at the "Summary Statistics". Record the mean and median (med).

Mean = $\qquad$ Median = $\qquad$
4. Now show the mathematical work or explain how to get the mean and the median.

Mean:
Median:
5. Which is larger: the mean or the median? What is the shape of the distribution?
6. We forgot to add your teacher to the data set! She works 65 hours per week. Add her value and see how the mean and median change.

New mean: $\qquad$ New median: $\qquad$

Important Ideas:

## Check for Understanding:

Is the pace of life slower in smaller cities?
Does it take less time to get to work in smaller cities? Here are the travel times in minutes for 15 workers in North Carolina, chosen at random by the Census Bureau along with a dotplot of the data:


1. Find the median. Interpret this value in context.
2. Calculate the mean travel time. Show your work.
3. Which measure of center—the median or the mean-describes a typical travel time to work for this sample of workers in North Carolina? Justify your answer.
