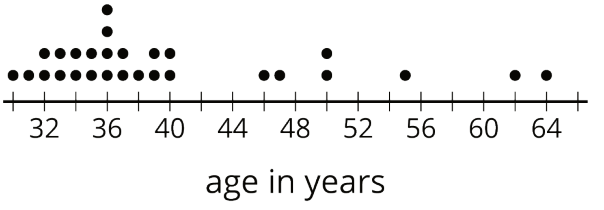
Lesson 14 Practice Problems

1. Here is a dot plot that shows the ages of teachers at a school.

   Which of these statements is true of the data set shown in the dot plot?



   A. The mean is less than the median.

   B. The mean is approximately equal to the median.

   C. The mean is greater than the median.

   D. The mean cannot be determined.

2. Priya asked each of five friends to attempt to throw a ball in a trash can until they succeeded. She recorded the number of unsuccessful attempts made by each friend as: 1, 8, 6, 2, 4. Priya made a mistake: The 8 in the data set should have been 18.

   How would changing the 8 to 18 affect the mean and median of the data set?

   A. The mean would decrease and the median would not change.

   B. The mean would increase and the median would not change.

   C. The mean would decrease and the median would increase.

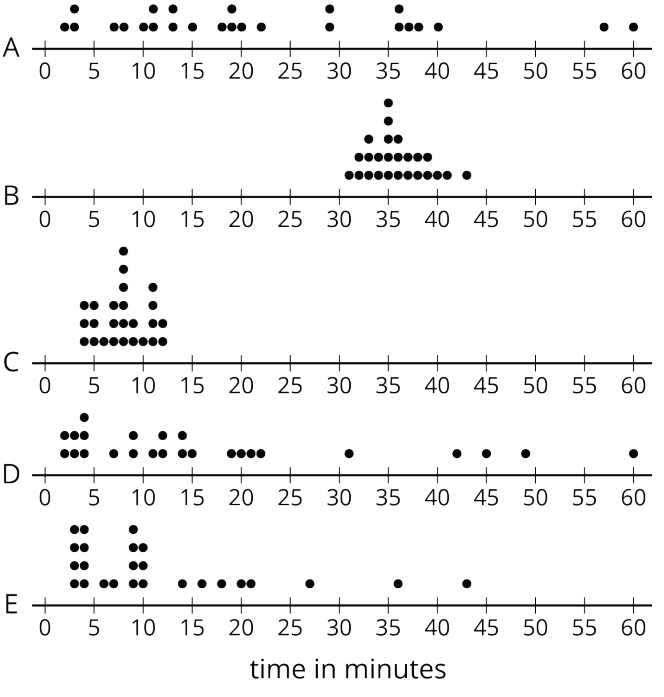
   D. The mean would increase and the median would increase.

3. In his history class, Han's homework scores are:

   100 100 100 100 95 100 90 100 0

   The history teacher uses the mean to calculate the grade for homework. Write an argument for Han to explain why median would be a better measure to use for his homework grades.

4. The dot plots show how much time, in minutes, students in a class took to complete each of five different tasks. Select **all** the dot plots of tasks for which the mean time is approximately equal to the median time.



5. Zookeepers recorded the ages, weights, genders, and heights of the 10 pandas at their zoo. Write two statistical questions that could be answered using these data sets.

(From Unit 8, Lesson 2.)

6. Here is a set of coordinates. Draw and label an appropriate pair of axes and plot the points. $A = (1, 0)$, $B = (0, 0.5)$, $C = (4, 3.5)$, $D = (1.5, 0.5)$

(From Unit 7, Lesson 12.)