

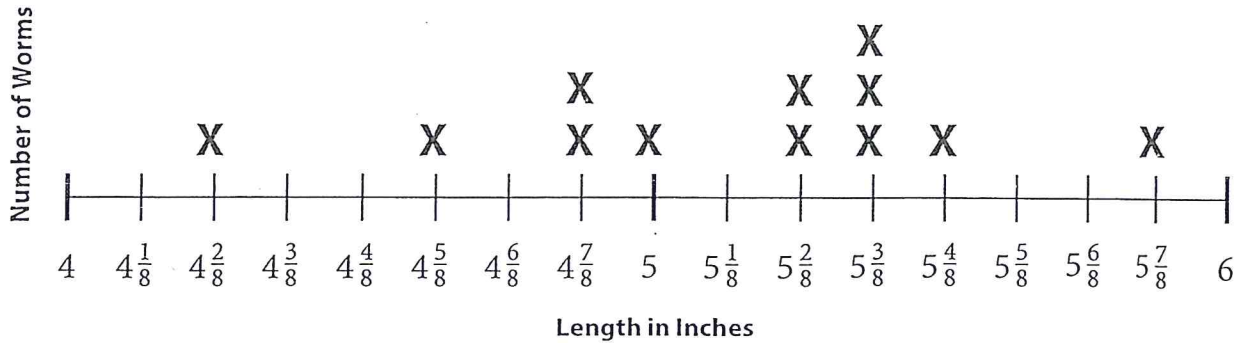
NAME _____

DATE _____



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Danny collected data about the length of 12 worms he found while he was digging in his yard. Use the data shown on Danny's line plot to answer the questions.



- What is the range of the data? (The range is difference between the length of the longest and the shortest worm.) Show your work.
- What is the median (the middle value in the set of X's) of the data?
- What is the mode (the most common worm length) of the data?
- What fraction of the 12 worms were less than 5 inches long?
- What fraction of the worms were longer than $4\frac{7}{8}$ inches but shorter than $5\frac{5}{8}$ inches?
- What fraction of the worms were more than 5 inches long?
- If Danny laid the two shortest worms end to end, how long would they be together? Show your work.
- If Danny put the longest and shortest worm end to end, how long would they be together? Show your work.

(continued on next page)

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9 Add or subtract these mixed numbers. Show your work.

a $2\frac{1}{3} + 4\frac{2}{3} =$

b $16\frac{5}{8} - 4\frac{3}{8} =$

c $8\frac{4}{7} - 3\frac{5}{7} =$

d $14\frac{5}{9} + 6\frac{7}{9} =$

e $20\frac{1}{8} - 19\frac{7}{8} =$

10 **CHALLENGE** Danny found one more worm and wanted to add the data to his line plot. He wondered how it would affect the original mode, median and range.

- a What is a length the worm could be that would *not* change the mode?
- b What is a length that would change the mode?
- c What is a length the worm could be that would *not* change the range?
- d What is a length that would change the range?
- e What is a length the worm could be that would *not* change the median?
- f What is a length that would change the median?