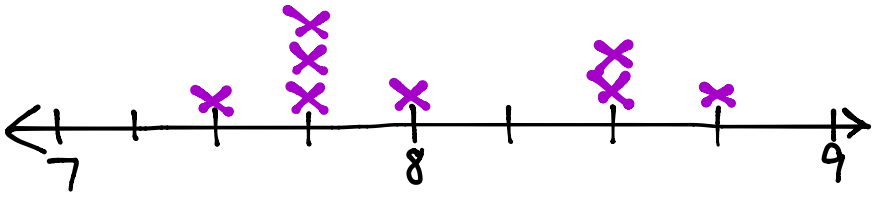
Name _____ Date _____

1. A group of children measured the lengths of their shoes. The measurements are shown in the table. Make a line plot to display the data.

Students	Length of Shoe (in inches)
Collin	$8\frac{1}{2}$
Dickon	$7\frac{3}{4}$
Ben	$7\frac{1}{2}$ smallest
Martha	$7\frac{3}{4}$
Lilias	8
Susan	$8\frac{1}{2}$
Frances	$7\frac{3}{4}$
Mary	$8\frac{3}{4}$ biggest



2. Solve each problem.

   a. Who has a shoe length 1 inch longer than Dickon?

   Mary

   b. Who has a shoe length 1 inch shorter than Susan?

   Ben

c. How many quarter inches long is Martha's shoe length?

$7\frac{3}{4} = (7 \times \frac{4}{4}) + \frac{3}{4} = \frac{28}{4} + \frac{3}{4} = \frac{31}{4}$

Martha's shoe length is 31 quarters inches long.

d. What is the difference, in inches, between Lilias's and Martha's shoe lengths?

$8 - 7\frac{3}{4} = 7\frac{4}{4} - 7\frac{3}{4} = \frac{1}{4}$

$\frac{1}{4}$ inch

e. Compare the shoe length of Ben and Frances using >, <, or =.

$7\frac{1}{2} < 7\frac{3}{4}$

f. How many students had shoes that measured less than 8 inches?

4 students had shoes that measure less than 8 inches.

g. How many children measured the length of their shoes?

There are 8 students.

h. Mr. Jones's shoe length was $\frac{25}{2}$ inches. Use >, <, or = to compare the length of Mr. Jones's shoe to the length of the longest student shoe length. Who had the longer shoe?

Mr. Jones: $\frac{25}{2} = \frac{24}{2} + \frac{1}{2} = 12 + \frac{1}{2} = 12\frac{1}{2}$ inches

$\frac{25}{2} > 8\frac{3}{4}$

3. Using the information in the table and on the line plot, write a question you could solve by using the line plot. Solve.

Answers will vary. Here is one example...

What is the difference, in inches, between the longest shoe and the shortest shoe?