

Making Line Plots

Joshua surveyed his classmates to collect data on their shoe sizes. He found the following information.

$7\frac{1}{2}$	7	$5\frac{1}{2}$	$6\frac{1}{2}$
$8\frac{1}{2}$	6	$7\frac{1}{2}$	$5\frac{1}{2}$
6	$7\frac{1}{2}$	$5\frac{1}{2}$	6
$6\frac{1}{2}$	6	8	6
$7\frac{1}{2}$	$7\frac{1}{2}$	8	$7\frac{1}{2}$

When you want to organize the data into a line plot, first organize the data. List the shoe sizes from greatest to least. Fill in the missing data below.

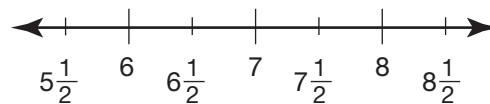
$5\frac{1}{2}$, 6, _____, 7, _____, _____, _____

Then make a table to show the frequency of the values.

Shoe Size	Tally	Frequency
$5\frac{1}{2}$		
6		
7		

Now draw a line plot.

Shoe Sizes



For questions 1–2, draw a line plot.

1.

$13\frac{1}{2}$	13	$14\frac{1}{4}$	$13\frac{1}{2}$	13
$14\frac{1}{4}$	$14\frac{1}{2}$	$14\frac{1}{2}$	13	$14\frac{1}{2}$

2.

$2\frac{1}{2}$	5	$2\frac{3}{4}$	$4\frac{1}{4}$	5
$2\frac{3}{4}$	$4\frac{1}{2}$	$4\frac{1}{2}$	5	$4\frac{1}{2}$
$4\frac{1}{4}$	5	5	$4\frac{1}{4}$	$4\frac{1}{4}$
$4\frac{1}{4}$	$4\frac{1}{2}$	$4\frac{1}{2}$		

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1. Which statement best describes the heights of the giraffes shown in the line plot?



- A The shortest giraffe is $16\frac{1}{4}$ feet tall.
- B The tallest giraffe is $17\frac{1}{2}$ feet tall.
- C Most of the giraffes are 17 feet tall.
- D There are four giraffes in the data set.

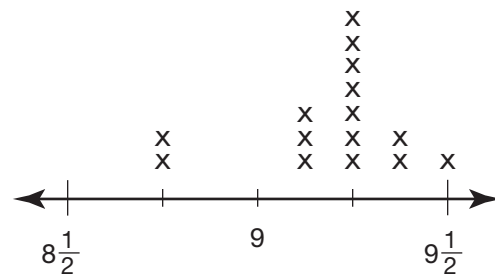
2. Marietta purchased 15 cucumbers to make pickles. The lengths of the cucumbers in inches are shown in the chart. Draw a line plot to show the lengths of the cucumbers.

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

3. Draw a line plot to represent the data in the table.

Value	Tally	Frequency
$5\frac{1}{4}$		3
$6\frac{3}{4}$		2
$7\frac{1}{8}$		5
$7\frac{1}{2}$		2
$8\frac{1}{4}$		2

4. Write a frequency chart that matches the data in the line plot.



5. **Writing to Explain** Write a description of the data in the line plot.
