LESSON MAKER PRO

Plot and Piece

Read line plots and add fractional lengths.

GRADE 5 · MT.5.MD.2

MT.5.MD.2 "Make a line plot to display a data set of measurements in fractions of a unit and use operations on fractions to solve problems involving information presented in line plots."

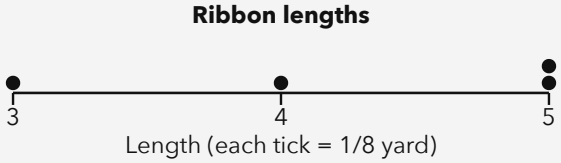
NAME _____ DATE _____

READ EACH MARK

Each mark on a line plot stands for one measurement. Read the tick labels, then add or subtract the lengths the question asks about.

WORKED EXAMPLE

Each tick is 1/8 yard. How many yards of ribbon are shown in all?



1. Read the lengths: 3/8, 4/8, 5/8, and 5/8 yard.
2. Add: (3 + 4 + 5 + 5)/8 = 17/8.
3. Rename: 17/8 = 2 1/8.

Answer: 2 1/8 yards

PRACTICE 4 problems

1 Make a line plot for these lengths: 1/4, 1/4, 2/4, 3/4 foot. How many marks belong at 1/4 foot?

ANSWER _____

2 Lengths: 1/4, 1/4, 1/2, 3/4, 3/4 inch. What is the total length of the two 3/4-inch pieces?

ANSWER _____

3 A 3/4-foot strip and a 1/4-foot strip are laid end to end. How much longer are they together than a 2/4-foot strip?

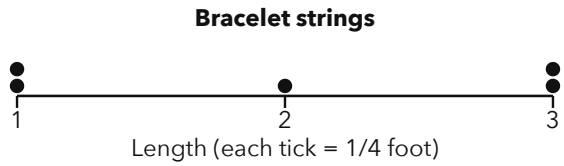
ANSWER _____

4 Lengths: 1/3, 2/3, 2/3 foot. What is their total length?

ANSWER _____

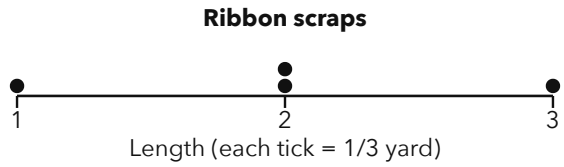
APPLY IT Show your work

1 Maya cut string for bracelets. Each tick is 1/4 foot. How much longer are the two longest strings together than the two shortest strings together?



ANSWER _____

2 A craft club measured ribbon scraps. Each tick is 1/3 yard. What is the total length of all the scraps?



ANSWER _____

CHALLENGE One step up

A bike shop cuts reflective tape into lengths of 1/4, 1/2, 1/2, 3/4, and 3/4 yard. Make a line plot. If the shop uses both 3/4-yard pieces, how much tape remains?

WORK SPACE AND ANSWER

ANSWER KEY

Plot and Piece

GRADE 5 · MT.5.MD.2

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	Make a line plot for these lengths: 1/4, 1/4, 2/4, 3/4 foot. How many marks belong at 1/4 foot?	**Line plot: 1/4 has 2 marks; 2/4 has 1 mark; 3/4 has 1 mark. There are 2 marks at 1/4 foot.**
2	Lengths: 1/4, 1/4, 1/2, 3/4, 3/4 inch. What is the total length of the two 3/4-inch pieces?	**1 1/2 inches**
3	A 3/4-foot strip and a 1/4-foot strip are laid end to end. How much longer are they together than a 2/4-foot strip?	**1/2 foot**
4	Lengths: 1/3, 2/3, 2/3 foot. What is their total length?	**1 2/3 feet**

PART 2 · APPLY IT

1. **1 foot** The two longest total 6/4 foot, and the two shortest total 2/4 foot. The difference is 4/4 foot, or 1 foot.
2. **2 2/3 yards** Add 1/3 + 2/3 + 2/3 + 3/3 = 8/3 yards, or 2 2/3 yards.

CHALLENGE

Line plot: 1/4 has 1 mark; 1/2 has 2 marks; 3/4 has 2 marks. 1 1/4 yards remain.

Accept equivalent fractions and correctly labeled line plots. In the challenge, the remaining lengths total 1/4 + 1/2 + 1/2 = 1 1/4 yards.