LESSON MAKER PRO

Measure the Dots

Add and subtract lengths on line plots.

GRADE 4 · 4.DA.A.20

4.DA.A.20 "Interpret data in graphs (picture, bar, and line plots) to solve problems using numbers and operations. a. Create a line plot to display a data set of measurements in fractions of a unit (1/2, 1/4, 1/8). b..."

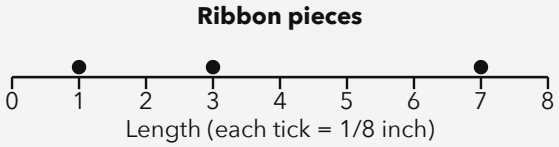
NAME _____ DATE _____

READ, THEN CALCULATE

Each dot on a line plot stands for one measurement. Check what each tick means, then add or subtract the lengths you need.

WORKED EXAMPLE

What is the total length of the two shortest pieces?



1. The two shortest pieces are 1/8 inch and 3/8 inch.
2. Add: 1/8 + 3/8 = 4/8 inch.
3. Simplify: 4/8 = 1/2.

Answer: 1/2 inch

PRACTICE 4 problems

1 A ribbon is 1/4 inch long. You add 1/2 inch. What is its new length?

ANSWER _____

2 You cut 1/2 inch from a 3/4-inch strip. How long is it now?

ANSWER _____

3 A sticker border uses 2/8 inch of blue tape and 1/4 inch of red tape. What is the total length?

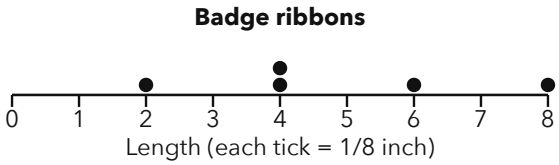
ANSWER _____

4 You cut 2/8 inch from a 1-inch paper strip. How long is it now?

ANSWER _____

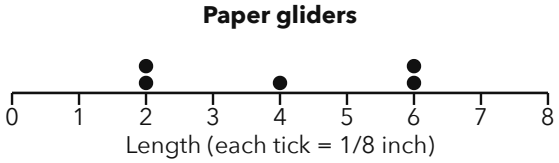
APPLY IT Show your work

1 A craft club measures ribbon pieces for badges. What is the total length of the two longest pieces?



ANSWER _____

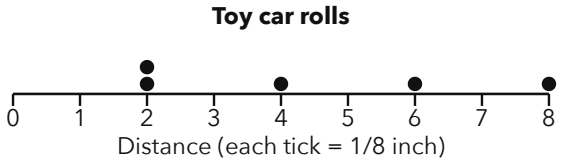
2 Students measure paper gliders. How much longer is the longest glider than the shortest?



ANSWER _____

CHALLENGE One step up

Mini toy cars roll the distances shown. How much farther do the two longest rolls go together than the two shortest rolls? Show your fraction work.



WORK SPACE AND ANSWER

ANSWER KEY

Measure the Dots

GRADE 4 · 4.DA.A.20

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	A ribbon is 1/4 inch long. You add 1/2 inch. What is its new length?	**3/4 inch**
2	You cut 1/2 inch from a 3/4-inch strip. How long is it now?	**1/4 inch**
3	A sticker border uses 2/8 inch of blue tape and 1/4 inch of red tape. What is the total length?	**1/2 inch**
4	You cut 2/8 inch from a 1-inch paper strip. How long is it now?	**3/4 inch**

PART 2 · APPLY IT

1. **1 3/4 inches** The two longest pieces are 8/8 inch and 6/8 inch. Their sum is 14/8 inches, or 1 3/4 inches.
2. **1/2 inch** Subtract the shortest length from the longest: 6/8 - 2/8 = 4/8 = 1/2 inch.

CHALLENGE

(8/8 + 6/8) - (2/8 + 2/8) = 10/8 = 1 1/4 inches

Accept equivalent fractions, such as 4/8 for 1/2 and 6/8 for 3/4. In the challenge, students must use both dots at the shortest distance.