LESSON MAKER PRO

Plot the Difference

Add and subtract lengths shown on line plots.

GRADE 4 · 4.DA.A.20.b

4.DA.A.20.b "Solve problems involving addition and subtraction of fractions using information presented in line plots."

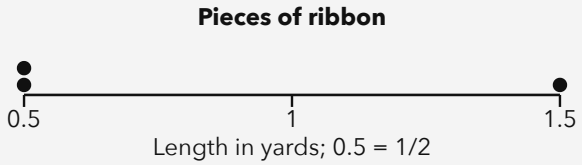
NAME _____ DATE _____

READ, COUNT, CALCULATE

Each X on a line plot stands for one measurement. Read the tick marks, count the Xs you need, then add or subtract the fractions.

WORKED EXAMPLE

What is the total length of the three pieces shown?

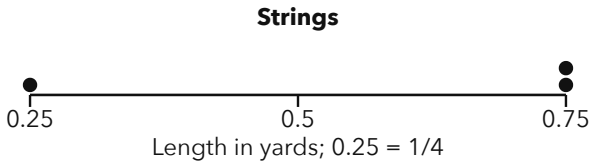


1. Count two pieces at 1/2 yard and one piece at 1 1/2 yards.
2. Add: 1/2 + 1/2 + 1 1/2 = 2 1/2.

Answer: 2 1/2 yards

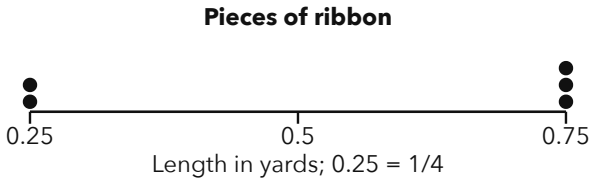
PRACTICE 6 problems

1 What is the combined length of the shortest and longest strings?



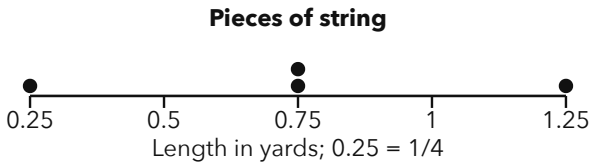
ANSWER _____

2 How much longer are all the 3/4-yard pieces together than all the 1/4-yard pieces together?



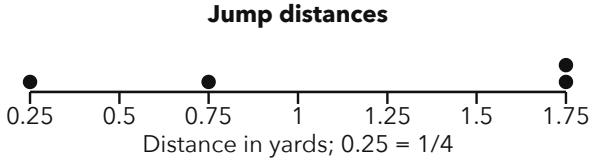
ANSWER _____

3 What is the total length of the pieces marked at 3/4 yard?



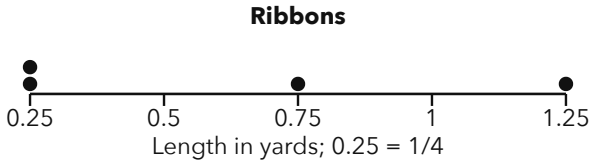
ANSWER _____

4 How much longer is the longest jump than the shortest jump?



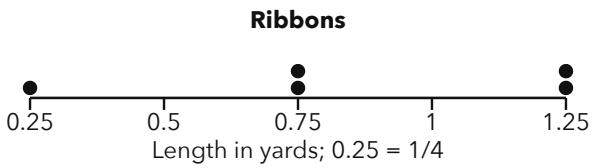
ANSWER _____

5 What is the total length of all the ribbons shown?



ANSWER _____

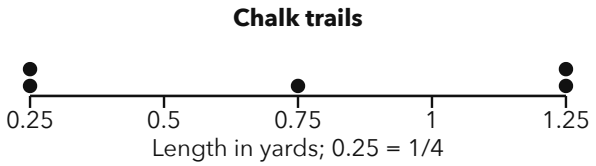
6 How much longer are both 1 1/4-yard ribbons together than both 3/4-yard ribbons together?



ANSWER _____

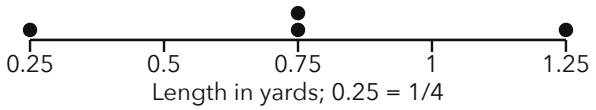
APPLY IT Show your work

1 Your class measures chalk trails on the playground. The lengths are shown on the line plot. If the two shortest trails are erased, what is the total length of the trails left?



ANSWER _____

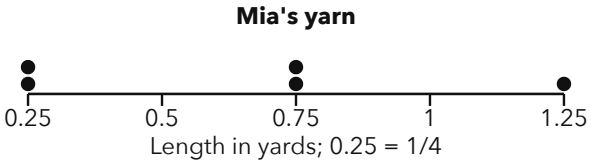
2 At a craft fair, you have the pieces of yarn shown on the line plot. You use all the 3/4-yard pieces. What is the total length of the yarn left?



ANSWER _____

CHALLENGE One step up

Mia has the pieces of yarn shown. She uses one 1/4-yard piece and one 3/4-yard piece. How much longer is the yarn she has left than the yarn she used? Show your reasoning with an equation.



WORK SPACE AND ANSWER

ANSWER KEY

Plot the Difference

GRADE 4 · 4.DA.A.20.b

PART 1 · PRACTICE

#	PROBLEM	ANSWER
1	What is the combined length of the shortest and longest strings?	**1 yard**
2	How much longer are all the 3/4-yard pieces together than all the 1/4-yard pieces together?	**1 3/4 yards**
3	What is the total length of the pieces marked at 3/4 yard?	**1 1/2 yards**
4	How much longer is the longest jump than the shortest jump?	**1 1/2 yards**
5	What is the total length of all the ribbons shown?	**2 1/2 yards**
6	How much longer are both 1 1/4-yard ribbons together than both 3/4-yard ribbons together?	**1 yard**

PART 2 · APPLY IT

1. **3 1/4 yards** The two 1/4-yard trails are erased. The remaining lengths total 3/4 + 1 1/4 + 1 1/4 = 3 1/4 yards.
2. **1 1/2 yards** The 1/4-yard and 1 1/4-yard pieces are left. Their lengths add to 1 1/2 yards.

CHALLENGE

1 1/4 yards. The total is 3 1/4 yards and she uses 1 yard, so (3 1/4 - 1) - 1 = 1 1/4 yards.

Accept equivalent fractions or mixed numbers with correct units. For the challenge, accept any correct equation that compares the yarn left with the yarn used.