Add and Subtract Fractions in Line Plots

Dear Family,

This week your child is learning to use line plots and to add and subtract fractions to solve problems.

A line plot is a way to organize a group of data, such as a set of measurements. A line plot gives a visual view of the data.

The line plot below shows the lengths of different pieces of yarn. Each **X** represents a piece of yarn. Since there are 9 **X**s, there are 9 pieces of yarn.

Lengths of Pieces of Yarn

Length (in inches)
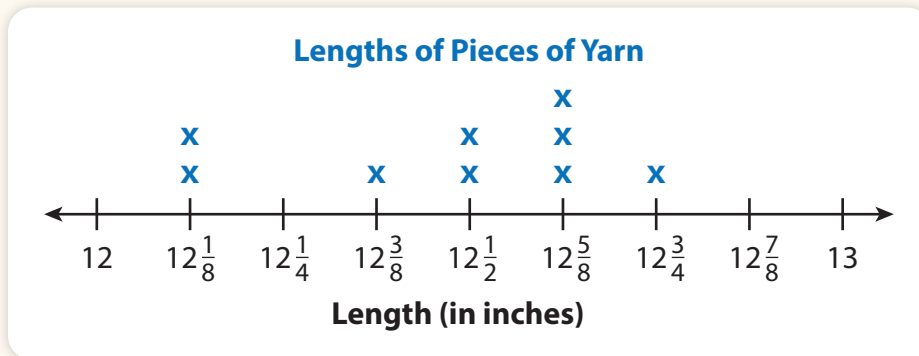
Xs that are one above another show pieces of yarn that have the same length. You can see at a glance that 2 pieces of yarn are $12\frac{1}{8}$ inches long and the longest piece of yarn is $12\frac{3}{4}$ inches.

To find the total length of all the pieces of yarn that are $12\frac{5}{8}$ inches long, add the individual lengths. There are 3 **X**s on the line plot above $12\frac{5}{8}$ inches, so find $12\frac{5}{8} + 12\frac{5}{8} + 12\frac{5}{8}$.

Add the whole numbers: $12 + 12 + 12 = 36$ Add the fractions: $\frac{5}{8} + \frac{5}{8} + \frac{5}{8} = \frac{15}{8}$

Add the two sums: $36 + 1\frac{7}{8} = 37\frac{7}{8}$ $\frac{15}{8} = \frac{8}{8} + \frac{7}{8}$, or $1\frac{7}{8}$

The total length of the three pieces of yarn is $37\frac{7}{8}$ inches.

Invite your child to share what he or she knows about using line plots to solve problems by doing the following activity together.

ACTIVITY ADD AND SUBTRACT FRACTIONS IN LINE PLOTS

Do this activity with your child to add and subtract fractions in line plots.

> Steve takes 12 nails out of a toolbox. He measures the length of each nail. This is what he writes:
>
> - 1 nail measures $\frac{1}{8}$ of an inch.
> - 4 nails measure $\frac{3}{8}$ of an inch.
> - 3 nails measure $\frac{1}{2}$ of an inch.
> - 3 nails measure $\frac{5}{8}$ of an inch.
> - 1 nail measures $\frac{7}{8}$ of an inch.

- Make a line plot to show the lengths of the nails. Use a blank number line. Label it with eighths fractions from 0 through 1.

- Write a title for the line plot, such as "Lengths of Nails from the Toolbox." Be sure to write a label below the number line, such as "Length (in inches)."

- Mark Xs on the line plot to show the data.

- Ask questions such as the ones below and have your child use the line plot to find the answers.

  1. *Which length nail are there the most of?*

  2. *What is the difference between the lengths of the longest nail and the shortest nail?*

  3. *How would the line plot change if there were another nail that measures $1\frac{3}{8}$ inches?*

Answers: **1.** $\frac{3}{8}$ of an inch; **2.** $\frac{6}{8}$ of an inch; **3.** Extend the number line, add eighths labels through $1\frac{6}{8}$ and mark an X above $1\frac{3}{8}$.

Explore Adding and Subtracting Fractions in Line Plots

You have learned how to add and subtract both fractions and mixed numbers and how to make line plots. Use what you know to try to solve the problem below.

Emma's class has a jar of earthworms. The class measures the length of each earthworm and records the data in a line plot. What is the difference between the lengths of the shortest and the longest earthworms?
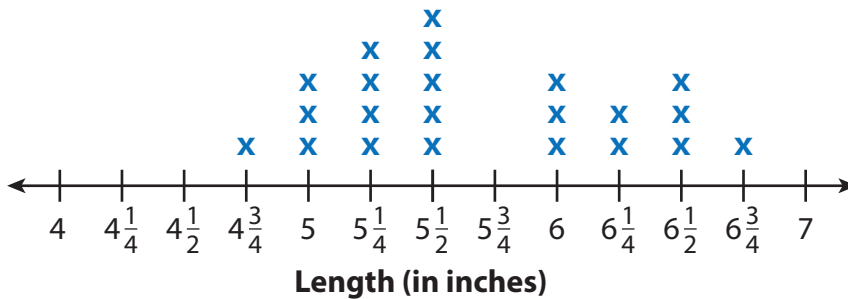
Earthworm Lengths

				X							
			X	X							
	X	X	X		X		X				
	X	X	X		X	X	X				
X	X	X	X		X	X	X	X			

$$4 \quad 4\frac{1}{4} \quad 4\frac{1}{2} \quad 4\frac{3}{4} \quad 5 \quad 5\frac{1}{4} \quad 5\frac{1}{2} \quad 5\frac{3}{4} \quad 6 \quad 6\frac{1}{4} \quad 6\frac{1}{2} \quad 6\frac{3}{4} \quad 7$$

Length (in inches)

TRY IT

🧰 Math Toolkit
- fraction circles
- fraction tiles
- fraction bars
- number lines 🔎
- grid paper
- fraction models 🔎

DISCUSS IT

Ask your partner: Can you explain that again?

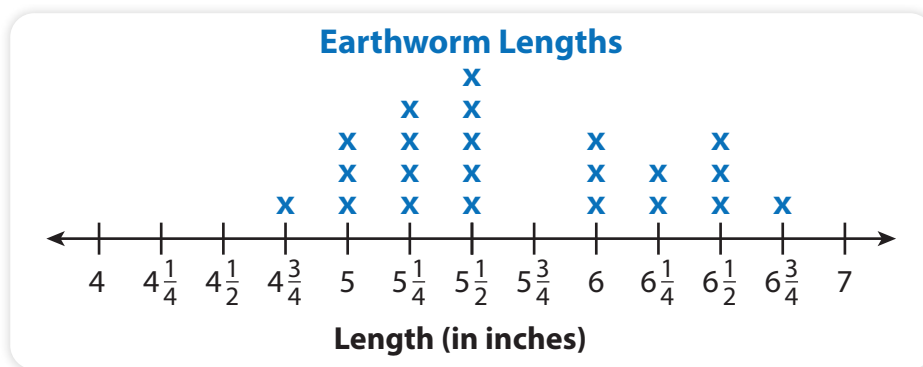**Tell your partner:** I knew . . . so I . . .

CONNECT IT

1 LOOK BACK

Explain how to find the difference between the lengths of the shortest and longest earthworms.

2 LOOK AHEAD

A line plot is a data display that uses marks above a number line to show the number of times a data value occurs. Each data value is represented with an **X**.

Earthworm Lengths

Length (in inches)

a. How many measurements are recorded on the line plot? Explain how you know.

b. What do the two Xs above $6\frac{1}{4}$ represent?

c. What length are the greatest number of earthworms? Explain.

d. Another earthworm has a length of $5\frac{3}{4}$ inches. Show this on the line plot.

3 REFLECT

If the number line is divided into fourths, why are numbers such as $4\frac{1}{2}$ and 5 used to label the number line in the line plot?

Prepare for Adding and Subtracting Fractions in Line Plots

1 Think about what you know about line plots. Fill in each box. Use words, numbers, and pictures. Show as many ideas as you can.
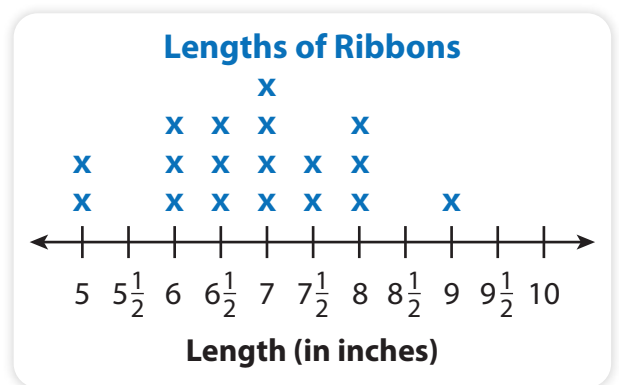
In My Own Words	My Illustrations
Examples	**Non-Examples**

line plot

2 Use the line plot to answer the questions.

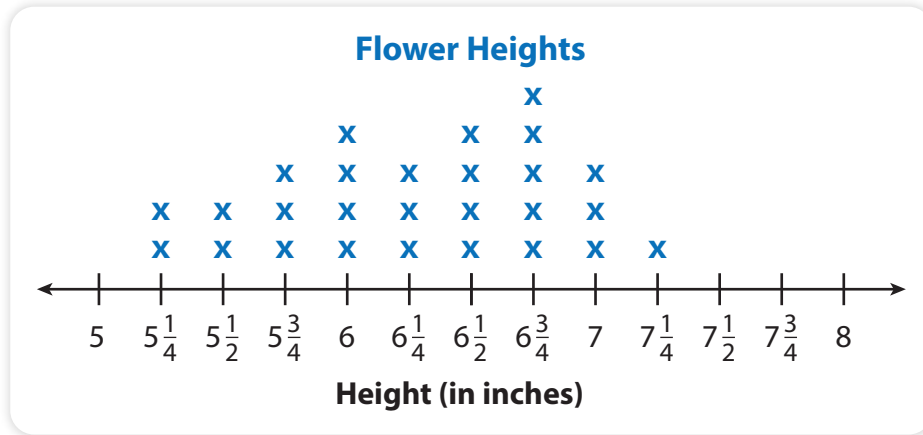**a.** What length are the greatest number of ribbons? Explain.

b. Suppose there is another ribbon that is $9\frac{1}{2}$ inches. Show this on the line plot.

Lengths of Ribbons

```
                    X
          X  X  X        X
   X      X  X  X  X  X
   X      X  X  X  X  X        X
   +--+--+--+--+--+--+--+--+--+--+-->
   5  5½ 6  6½ 7  7½ 8  8½ 9  9½ 10
```

Length (in inches)

3 Solve the problem. Show your work.

Marlon measures the height of each flower in a vase. He records the data in a line plot. What is the difference between the heights of the shortest and tallest flowers?

Flower Heights

```
                                    x
                        x       x   x
                    x   x   x   x   x   x
            x   x   x   x   x   x   x   x
            x   x   x   x   x   x   x   x   x
    ←———+———+———+———+———+———+———+———+———+———+———+———+———→
        5  5¼  5½  5¾   6  6¼  6½  6¾   7  7¼  7½  7¾   8
```

Height (in inches)

Solution ....

....

4 Check your answer. Show your work.

Develop Representing Data on a Line Plot

Read and try to solve the problem below.

> **Ten students in Mrs. Holbrook's class are growing plants. One day, they measure the heights of the plants in inches. The heights are shown below. Make a line plot to represent the data.**
>
> $2\frac{1}{2}$, $1\frac{7}{8}$, $1\frac{7}{8}$, $1\frac{1}{4}$, $2\frac{5}{8}$, $2\frac{1}{8}$, $1\frac{7}{8}$, $1\frac{1}{2}$, $1\frac{7}{8}$, $2\frac{1}{8}$

TRY IT

Math Toolkit
- number lines
- grid paper
- fraction models

DISCUSS IT

Ask your partner: Do you agree with me? Why or why not?

Tell your partner: I agree with you about . . . because . . .

Explore different ways to understand representing data on a line plot.

> **Ten students in Mrs. Holbrook's class are growing plants. One day, they measure the heights of the plants in inches. The heights are shown below. Make a line plot to represent the data.**
>
> $2\frac{1}{2}$, $1\frac{7}{8}$, $1\frac{7}{8}$, $1\frac{1}{4}$, $2\frac{5}{8}$, $2\frac{1}{8}$, $1\frac{7}{8}$, $1\frac{1}{2}$, $1\frac{7}{8}$, $2\frac{1}{8}$
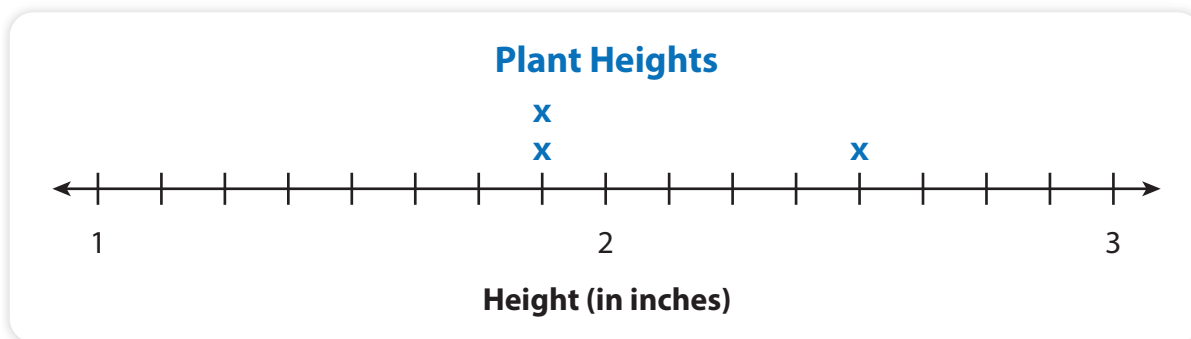
MODEL IT

You can represent data values that are mixed numbers on a line plot.

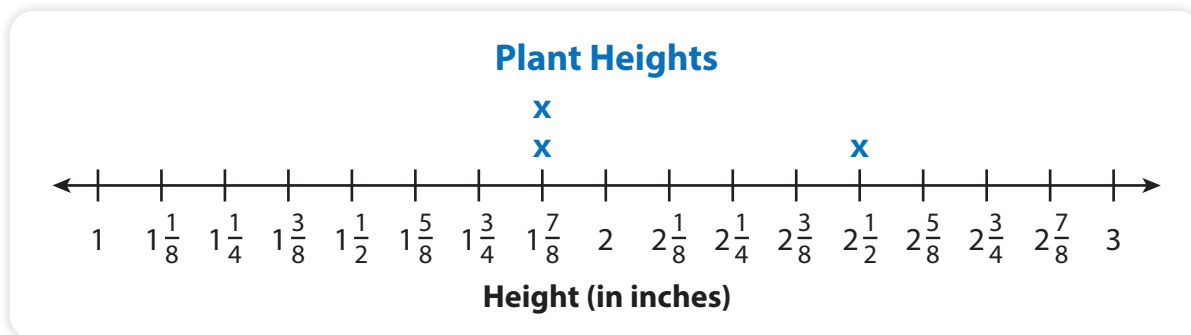The number line is divided into eighths from 1 to 3.

The first three data values of $2\frac{1}{2}$, $1\frac{7}{8}$, and $1\frac{7}{8}$ are represented with **X**s above the number line.

Plant Heights

Height (in inches)

MODEL IT

You can represent data values that are mixed numbers on a line plot with a number line divided into eighths and labeled.

Each tick mark on the line plot is labeled. The labels help you locate where to put the **X**s for each data value. The first three data values of $2\frac{1}{2}$, $1\frac{7}{8}$, and $1\frac{7}{8}$ are shown.

Plant Heights

| 1 | $1\frac{1}{8}$ | $1\frac{1}{4}$ | $1\frac{3}{8}$ | $1\frac{1}{2}$ | $1\frac{5}{8}$ | $1\frac{3}{4}$ | $1\frac{7}{8}$ | 2 | $2\frac{1}{8}$ | $2\frac{1}{4}$ | $2\frac{3}{8}$ | $2\frac{1}{2}$ | $2\frac{5}{8}$ | $2\frac{3}{4}$ | $2\frac{7}{8}$ | 3 |

Height (in inches)

CONNECT IT

Now you will use the problem from the previous page to help you understand how to represent data on a line plot.

1 Look at the **Model Its**. Why do the number lines go from 1 to 3? Why are the number lines divided into eighths?

2 Why are there two Xs above one of the tick marks?

3 Plot the remaining data values to complete the Plant Heights line plot below.

Plant Heights

Height (in inches)
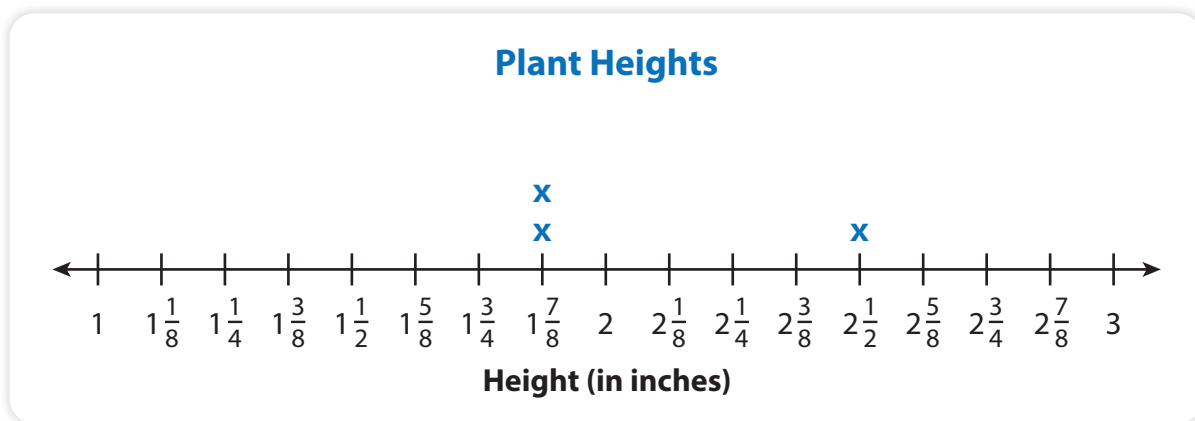
4 Describe how to make a line plot with data that include fractions.

5 REFLECT

Look back at your **Try It**, strategies by classmates, and **Model Its**. Which models or strategies do you like best for representing data on a line plot? Explain.
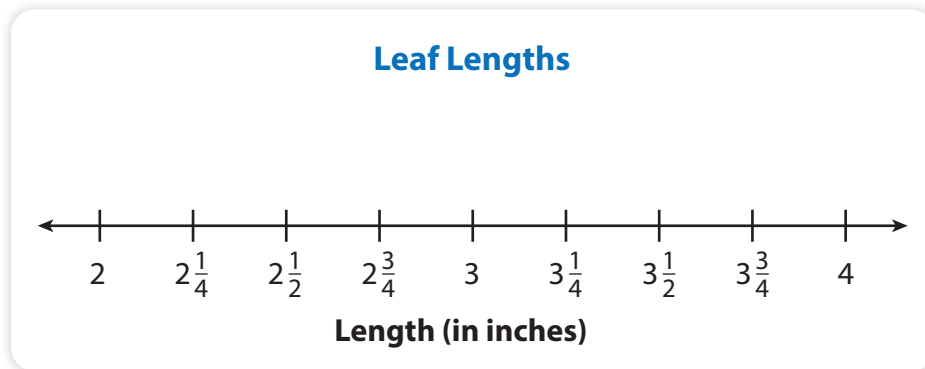
....

....

....

APPLY IT

Use what you just learned to solve these problems.

6 The data below show the length of leaves, in inches, that Jill collects. Complete the line plot to display the data.
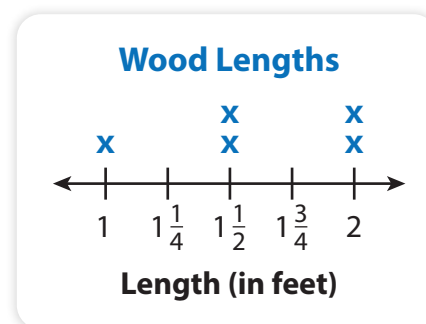
$2\frac{1}{2}$, $2\frac{1}{4}$, $3\frac{1}{2}$, $2\frac{3}{4}$, 3, $2\frac{1}{2}$, $2\frac{1}{2}$, 3

Leaf Lengths

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

Length (in inches)

7 Al records the length of some fish, in inches: $9\frac{2}{8}$, $10\frac{4}{8}$, $10\frac{5}{8}$, $9\frac{6}{8}$, $9\frac{7}{8}$, 10, $10\frac{1}{8}$, $9\frac{6}{8}$, $10\frac{3}{8}$. Make a line plot of the data.

8 The lengths in feet of some pieces of wood are shown below. Fix the line plot at the right to correctly show the data.

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

Wood Lengths

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

Length (in feet)

Practice Representing Data on Line Plots

**Study the Example showing how to make a line plot. Then solve problems 1–5.**

EXAMPLE

Students in science class measure the widths of butterfly wingspans, in inches. The widths are shown in the table. Make a line plot to represent the data.

Butterfly Wingspans (in inches)					
$\frac{3}{4}$	$\frac{7}{8}$	$1\frac{3}{8}$	$1\frac{1}{2}$	$1\frac{1}{4}$	$\frac{3}{4}$

Draw and label a number line by eighths. Put an X above each butterfly wingspan width.

Butterfly Wingspan Widths
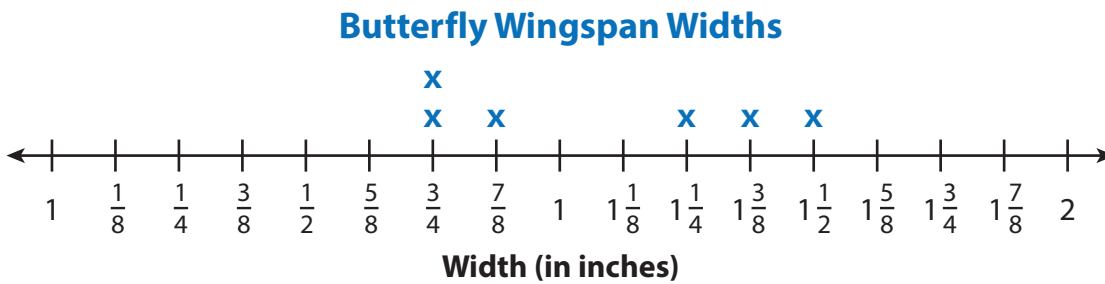
The height of fourth graders is measured on the first day of school and on the last day of school. The growth, in inches, of some students is below.

$$3, \ 1\frac{6}{8}, \ 2\frac{2}{8}, \ 1\frac{4}{8}, \ 2\frac{2}{8}, \ 2\frac{7}{8}$$

1 Complete the line plot below to show the data.

Growth of Students
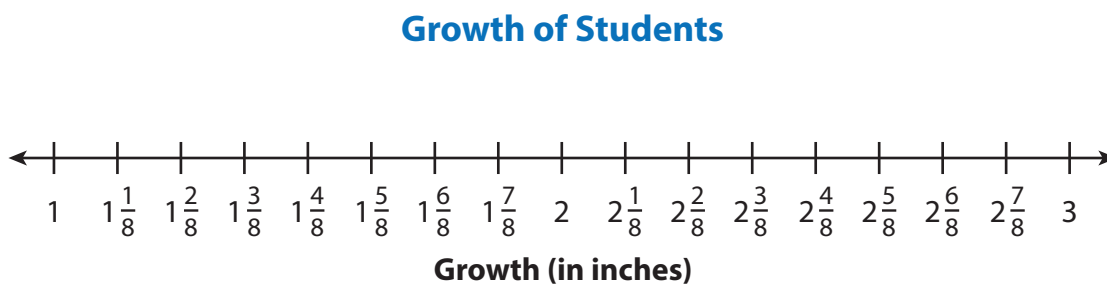
Micah's dog has 8 puppies. The length, in inches, of each puppy is listed below.

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

2 In a line plot, which value will have three Xs above it? ....

3 Could a line plot with a number line from 5 to 6 be used to represent the data? Explain.

4 Draw a line plot to represent the data.

5 Use the line plot to answer the questions.

　　a. How many measurements are recorded? ....

　　b. What is the longest length of a puppy? ....

　　c. What is the shortest length of a puppy? ....
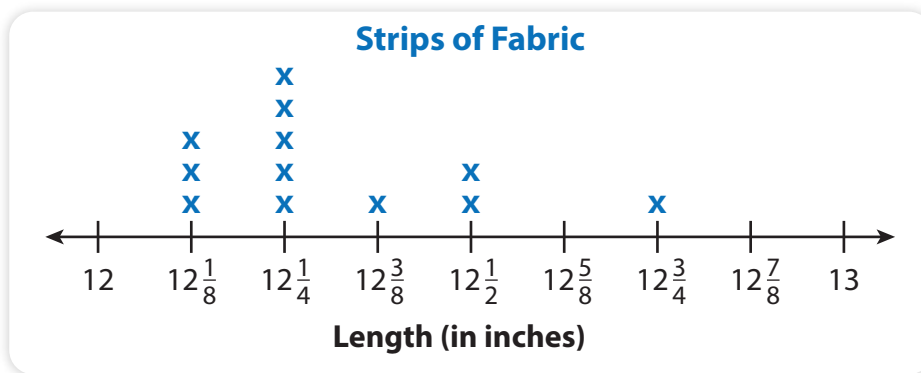
　　d. How many puppies are less than or equal to $4\frac{1}{2}$ inches in length? ....

　　e. How many puppies are greater than $4\frac{1}{2}$ inches in length? ....

Develop Adding Fractions in Line Plots

Read and try to solve the problem below.

> **Sophia is making a border for a quilt. She wants to use leftover strips of fabric. She measures the length of each strip and records the information in a line plot. Sophia puts together the five strips of fabric that are the same length. What is the total length of the five strips of fabric?**

Strips of Fabric

```
            x
            x
    x       x
    x       x           x
    x       x       x   x               x
 ───┼───┼───┼───┼───┼───┼───┼───┼───┼──→
    12  12⅛ 12¼ 12⅜ 12½ 12⅝ 12¾ 12⅞ 13
```

Length (in inches)

TRY IT

🧰 **Math Toolkit**
- fraction circles
- fraction tiles
- fraction bars
- number lines 🖱
- grid paper
- fraction models 🖱

DISCUSS IT

Ask your partner: How did you get started?

Tell your partner: I started by . . .

Explore different ways to understand addition of fractions in line plots.

> Sophia is making a border for a quilt. She wants to use leftover strips of fabric. She measures the length of each strip and records the information in a line plot. Sophia puts together the five strips of fabric that are the same length. What is the total length of the five strips of fabric?

Strips of Fabric

Length (in inches)
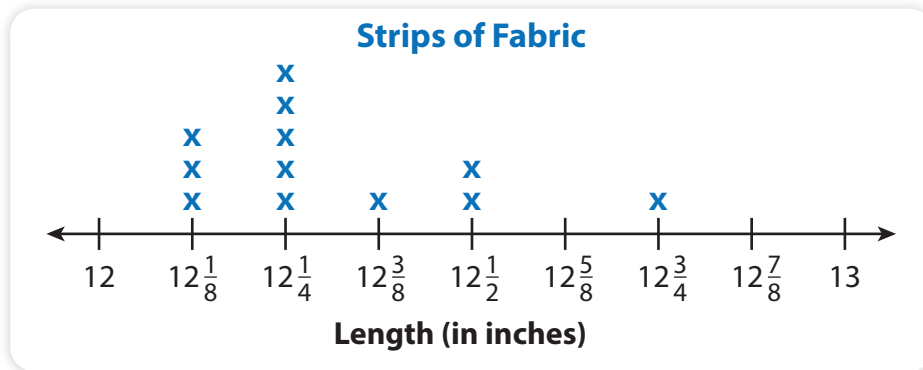
PICTURE IT
You can use a picture to help solve addition problems with line plots.

The picture shows the five strips of fabric placed next to one another to make one long strip.

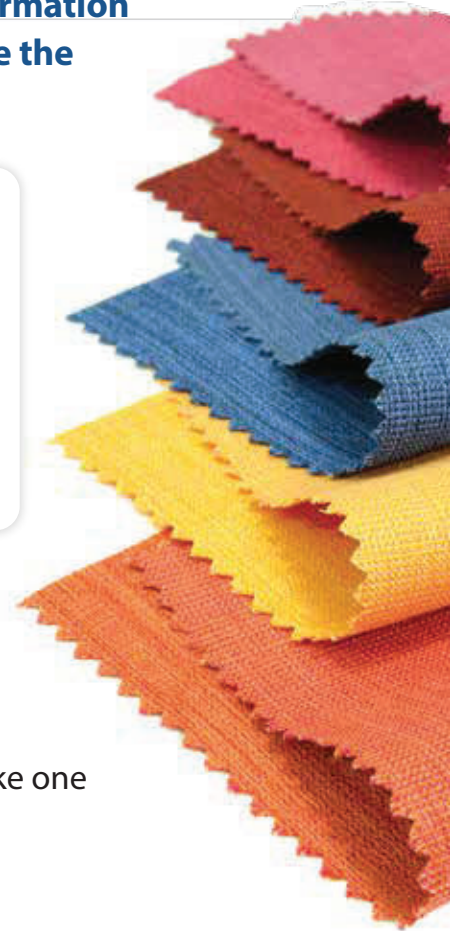| $12\frac{1}{4}$	$12\frac{1}{4}$	$12\frac{1}{4}$	$12\frac{1}{4}$	$12\frac{1}{4}$
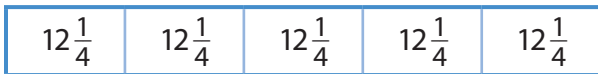
MODEL IT
You can break up the whole numbers and fractions to help you add the lengths.

Add the whole numbers first: $12 + 12 + 12 + 12 + 12$

Then add the fractions: $\frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$

CONNECT IT

Now you will use the problem from the previous page to help you understand how to solve problems involving the addition of fractions in line plots.

1 Write an expression to find the total length of the five strips of fabric that Sophia puts together.

2 What is the sum of the whole numbers? ....

What is the sum of the fractions? ....

Write the sum of the fractions as a mixed number. ....

What is the total length of the five strips? ....

3 How do you solve a problem about adding fractions or mixed numbers in a line plot?

4 **REFLECT**

Look back at your **Try It**, strategies by classmates, and **Picture It** and **Model It**. Which models or strategies do you like best for solving problems involving the addition of fractions in line plots? Explain.

....

....

....

....

APPLY IT

Use what you just learned to solve these problems.

Strips of Fabric

x
x
x   x
x   x   x
x   x   x   x   x

12    $12\frac{1}{8}$ $12\frac{1}{4}$ $12\frac{3}{8}$ $12\frac{1}{2}$ $12\frac{5}{8}$ $12\frac{3}{4}$ $12\frac{7}{8}$ 13

Length (in inches)
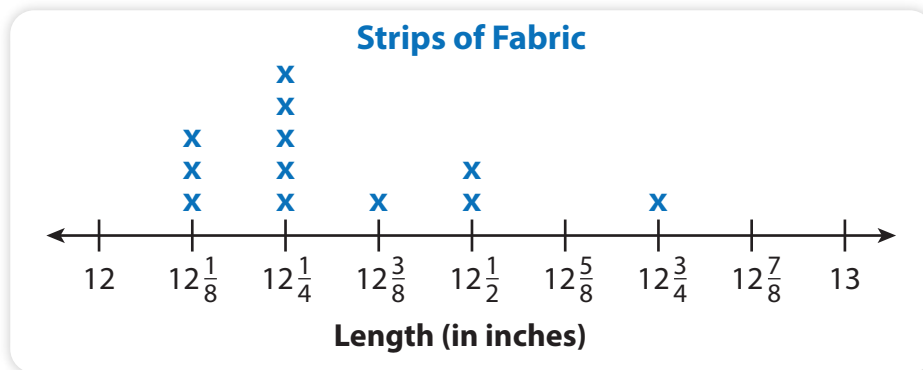
5   Use the line plot above. What is the length of all the $12\frac{1}{8}$-inch strips combined? Show your work.

Solution ....

6   Kay hikes on four days this week. The total distance she hikes is 10 miles. Mark Xs on the number line below to make a possible line plot for the data.

Hikes

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

Distance (in miles)
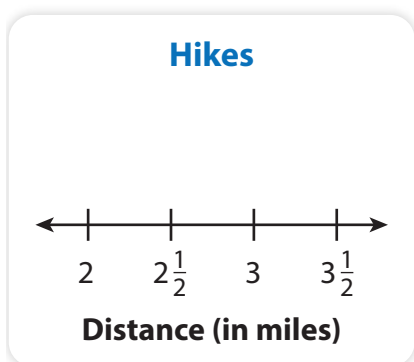
Practice Adding Fractions in Line Plots

Study the Example showing how to solve an addition problem with a line plot. Then solve problems 1–5.

EXAMPLE

Ashley is decorating a frame with seashells. She wants to know if all the shells will fit along the edge of a 13-inch wide frame. She measures the width of each shell and records the information in a line plot. Suppose Ashley puts all the shells in a row. Will the total width of the shells fit on the frame?

Seashells

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

Width (in inches)
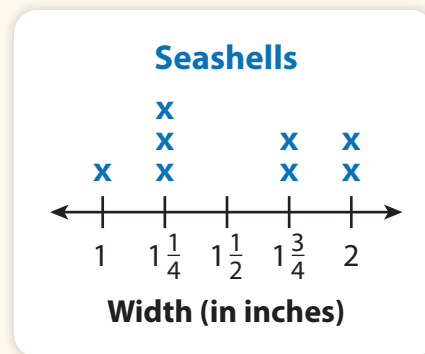
Write an addition expression. $1 + 1\frac{1}{4} + 1\frac{1}{4} + 1\frac{1}{4} + 1\frac{3}{4} + 1\frac{3}{4} + 2 + 2$

Then add. $10\frac{9}{4} = 10 + 2\frac{1}{4} = 12\frac{1}{4}$

The total width of the shells is $12\frac{1}{4}$ inches.

$12\frac{1}{4} < 13$, so the shells will fit on the frame.

1 Look at the line plot in the Example. Ashley decides to glue the four largest shells along the edge of another frame. The shells fit exactly. How wide is the other frame? Show your work.
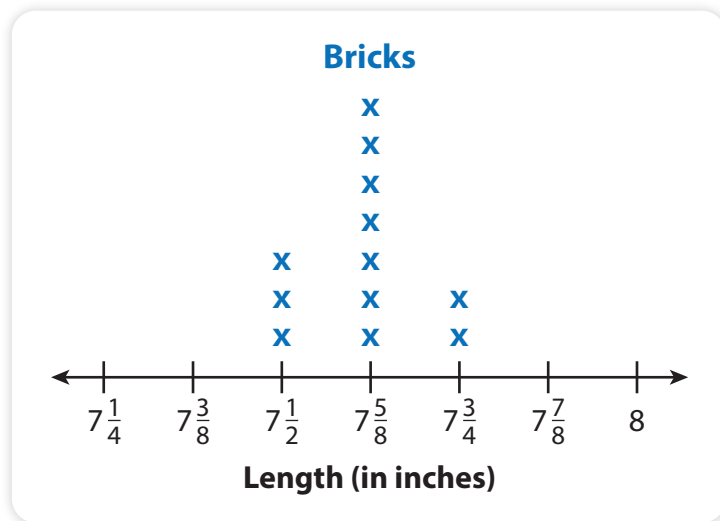
Solution ....

2 Ashley puts the $1\frac{1}{4}$-inch shells in a row, touching without gaps. What is the total width of the row of shells? Show your work.

Solution ....

A standard-sized brick should be $7\frac{5}{8}$ inches long. The line plot shows the actual lengths of 12 different bricks.

Bricks

Length (in inches)

③ What is the sum of the lengths of all the bricks that are exactly $7\frac{5}{8}$ inches long? Show your work.

Solution ....

④ What is the sum of the lengths of all the bricks that are shorter than $7\frac{5}{8}$ inches long? Show your work.

*Solution* ....

⑤ What is the sum of the lengths of all the bricks that are longer than $7\frac{5}{8}$ inches long? Show your work.

Solution ....

Develop Subtracting Fractions in Line Plots

Read and try to solve the problem below.

There are many kinds of dragonflies that are different in length. A scientist measures the lengths of different dragonflies and makes a line plot to show the measurements. What is the difference between the lengths of the longest and the shortest dragonfly?

Dragonfly Lengths

Length (in inches)
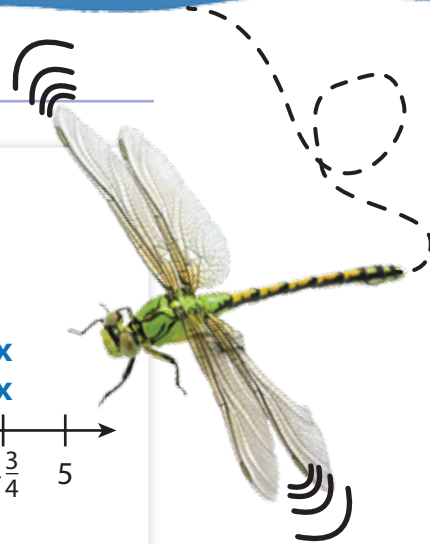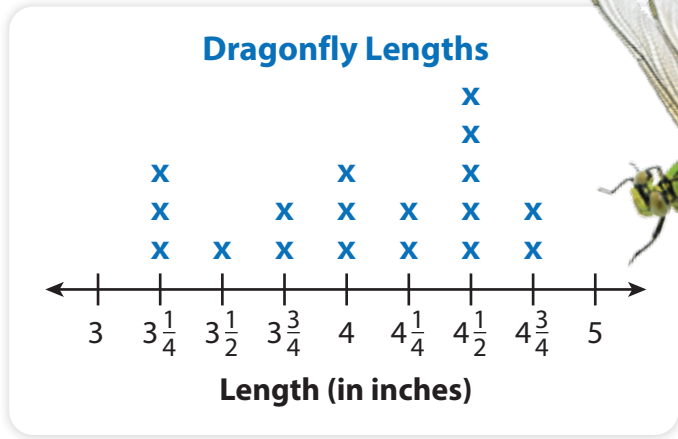
TRY IT

Math Toolkit
- fraction circles
- fraction tiles
- fraction bars
- number lines
- grid paper
- fraction models

DISCUSS IT

Ask your partner: Why did you choose that strategy?

Tell your partner: A model I used was . . . It helped me . . .

Explore different ways to understand subtraction of fractions in line plots.

> **There are many kinds of dragonflies that are different in length. A scientist measures the lengths of different dragonflies and makes a line plot to show the measurements. What is the difference between the lengths of the longest and the shortest dragonfly?**
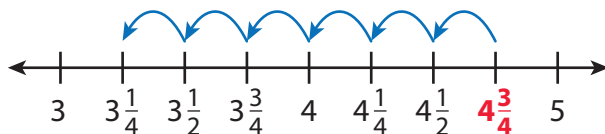
Dragonfly Lengths

Length (in inches)
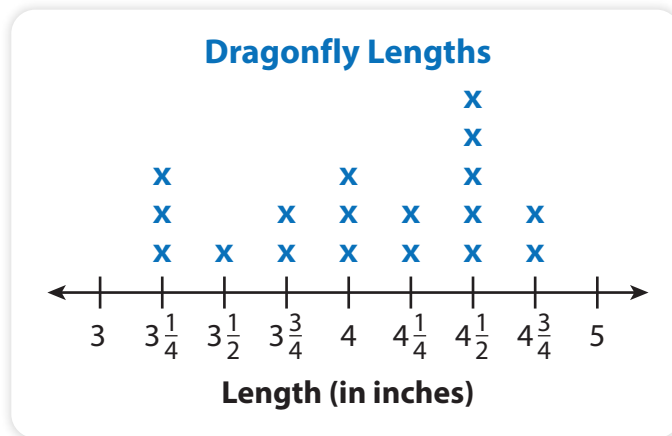
PICTURE IT

You can use a picture to help solve subtraction problems with line plots.

Length of longest dragonfly: $4\frac{3}{4}$ in.	
Length of shortest dragonfly: $3\frac{1}{4}$ in.	Difference in lengths: ? in.

MODEL IT

You can use a number line to solve subtraction problems with line plots.

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

Start at $\mathbf{4\frac{3}{4}}$. Jump back by fourths until you get to $3\frac{1}{4}$.

CONNECT IT

Now you will use the problem from the previous page to help you understand how to solve problems involving the subtraction of fractions in line plots.

1 Length of the longest dragonfly: ....

Length of the shortest dragonfly: ....

2 Write an expression that can be used to find the difference between the

two lengths. ....

3 Look at **Model It** on the previous page. Explain how you could use the number line with arrows to find the difference between the two lengths.

4 How can you check that the difference in lengths you found is correct?

5 REFLECT

Look back at your **Try It**, strategies by classmates, and **Picture It** and **Model It**. Which models or strategies do you like best for solving problems involving the subtraction of fractions in line plots? Explain.

....

....

....

....

APPLY IT

Use what you just learned to solve these problems.

Dragonfly Lengths

Length (in inches)
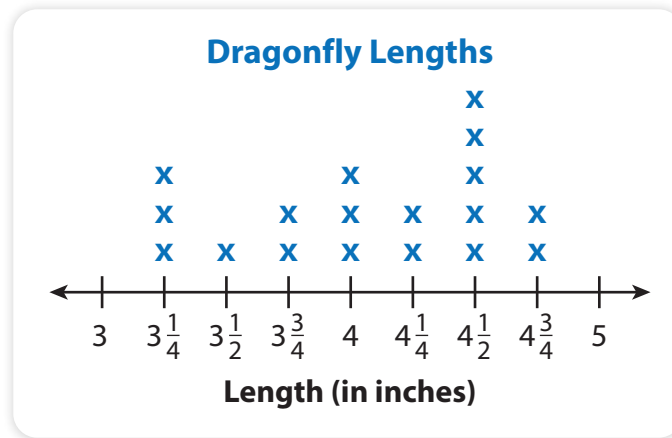
6 Use the line plot above. What length are the greatest number of dragonflies? What length are the least number of dragonflies? What is the difference between the two lengths?

7 The line plot below shows the lengths of pieces of ribbon.
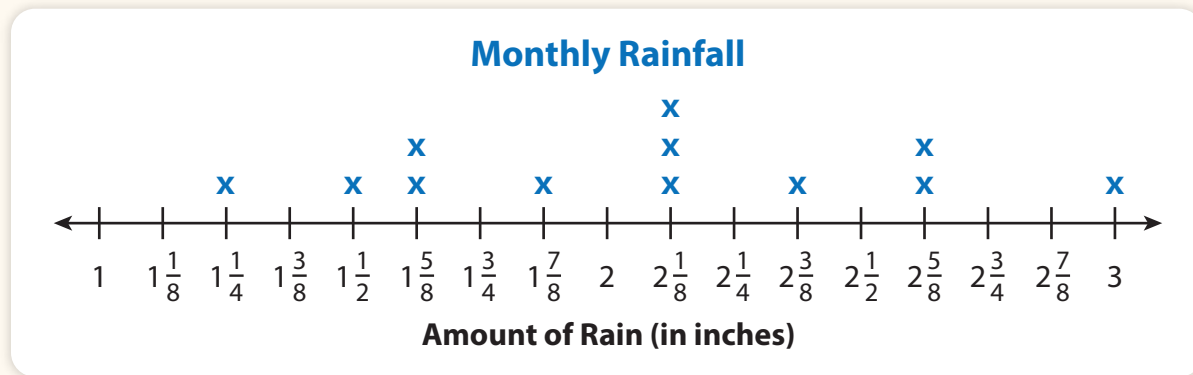
Pieces of Ribbon

Length (in inches)
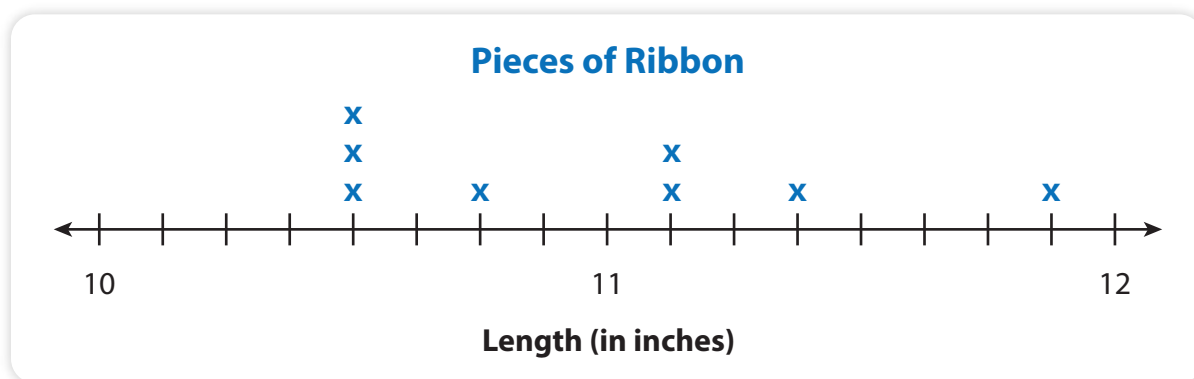
Terri's piece of ribbon is $1\frac{5}{8}$ inches shorter than the longest piece of ribbon.

How long is Terri's piece of ribbon? Explain.

Practice Subtracting Fractions in Line Plots

Study the Example showing how to solve a subtraction problem with a line plot. Then solve problems 1–4.

EXAMPLE

The monthly rainfall, in inches, for one city is shown in the line plot. What is the difference in inches of rain between the month with the greatest amount of rain and the month with the least amount of rain?

Monthly Rainfall

| | | X | | | | | X | | | X | | | | |
| | X | X | | X | X | | X | X | | X | | | | X |

$$1 \quad 1\frac{1}{8} \quad 1\frac{1}{4} \quad 1\frac{3}{8} \quad 1\frac{1}{2} \quad 1\frac{5}{8} \quad 1\frac{3}{4} \quad 1\frac{7}{8} \quad 2 \quad 2\frac{1}{8} \quad 2\frac{1}{4} \quad 2\frac{3}{8} \quad 2\frac{1}{2} \quad 2\frac{5}{8} \quad 2\frac{3}{4} \quad 2\frac{7}{8} \quad 3$$

Amount of Rain (in inches)

Write a subtraction expression. $3 - 1\frac{1}{4}$ or $\frac{12}{4} - \frac{5}{4}$

Find the difference. $\frac{12}{4} - \frac{5}{4} = \frac{7}{4}$ or $1\frac{3}{4}$

The difference is $1\frac{3}{4}$ inches.

1 Which questions below can be answered using the line plot in the Example above?

Ⓐ In 3 months, it rained the same amount. What is the difference between that amount and the amount in the month when it rained the most?

Ⓑ How much rain fell in the 3 months with the greatest amount of rainfall?

Ⓒ In how many months did it rain more than 2 inches?

Ⓓ How much rainfall occurred in January?

Ⓔ What is the sum of the amount of rainfall last month and this month?

Marine biologists catch fish for research. They measure the sea bass they catch and record the lengths in the line plot below.

Lengths of Sea Bass

Length (in inches)
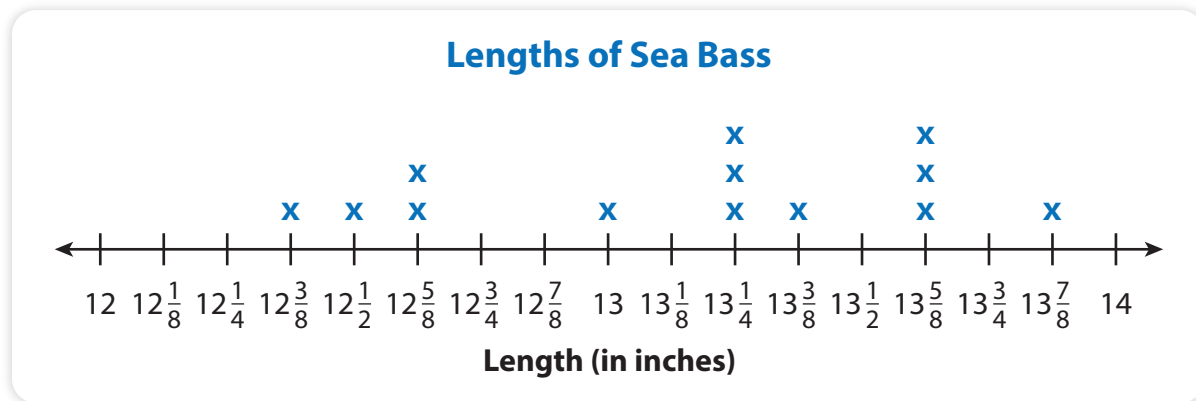
2 What is the difference in length between the longest and shortest sea bass that the biologists catch? Show your work.

Solution ....

3 Sea bass that are shorter than 13 inches must be put back into the ocean. How many more inches does the shortest fish need to grow to be 13 inches? Show your work.

Solution ....

4 Sea bass can grow to be 23 inches long. What is the difference between 23 inches and the length of the longest fish in this data? Show your work.
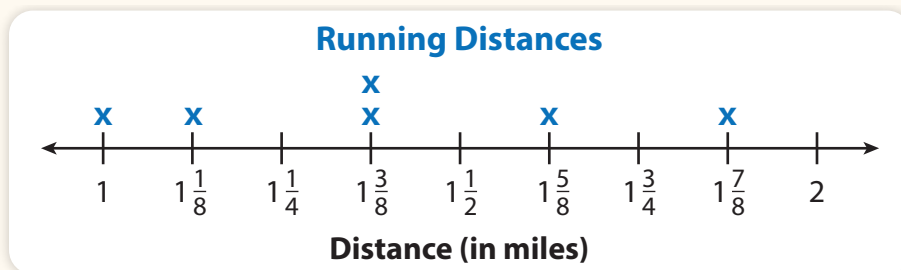
Solution ....

Refine Adding and Subtracting Fractions in Line Plots

Complete the Example below. Then solve problems 1–7.

EXAMPLE

Sue records the distances she runs in one week. How far does she run altogether?

Running Distances

Distance (in miles)

Look at how you could show your work using equations.

Add the whole numbers: $1 + 1 + 1 + 1 + 1 + 1 = 6$

Add the fractional parts of each mixed number:

$\frac{1}{8} + \frac{3}{8} + \frac{3}{8} + \frac{5}{8} + \frac{7}{8} = \frac{19}{8} = 2\frac{3}{8}$

Solution ....

> The student adds the whole numbers and the fractions separately.

PAIR/SHARE
How else could you solve the problem?

APPLY IT

1 A marine biologist at an aquarium records the lengths of the dolphins in feet. Make a line plot of the data shown below.
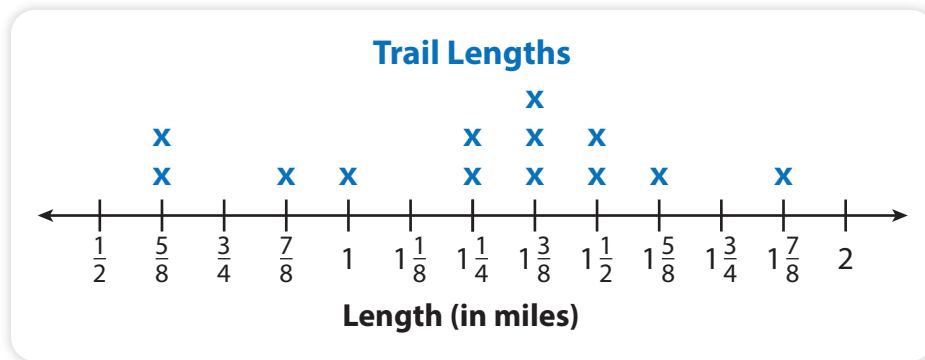
$8\frac{3}{4}$, $9\frac{1}{2}$, $9\frac{1}{4}$, $8\frac{1}{2}$, $8\frac{7}{8}$, $9\frac{1}{2}$, $8\frac{1}{2}$, $9\frac{1}{4}$, $9\frac{5}{8}$, $9\frac{1}{2}$

> What length are the greatest number of dolphins?

PAIR/SHARE
Explain how you labeled the tick marks.

2 A park has several trails of different lengths. The lengths of the trails are shown in the line plot. Ellie's family hikes all the trails that are $1\frac{3}{8}$ miles long. How far do they hike? Show your work.

How many trails have a length of $1\frac{3}{8}$ miles?

Trail Lengths

								X				
	X					X	X	X				
	X		X	X		X	X	X	X		X	

$\frac{1}{2}$ $\frac{5}{8}$ $\frac{3}{4}$ $\frac{7}{8}$ 1 $1\frac{1}{8}$ $1\frac{1}{4}$ $1\frac{3}{8}$ $1\frac{1}{2}$ $1\frac{5}{8}$ $1\frac{3}{4}$ $1\frac{7}{8}$ 2

Length (in miles)

PAIR/SHARE
Describe all of the ways you can solve the problem. Which is your favorite? Why?

Solution ....

3 Use the line plot in problem 2.

What is the difference in length between the longest trail and the shortest trail?

Will you add or subtract to find the difference?

Ⓐ $\frac{6}{8}$ of a mile

Ⓑ 1 mile

Ⓒ $1\frac{2}{8}$ miles

Ⓓ $2\frac{4}{8}$ miles

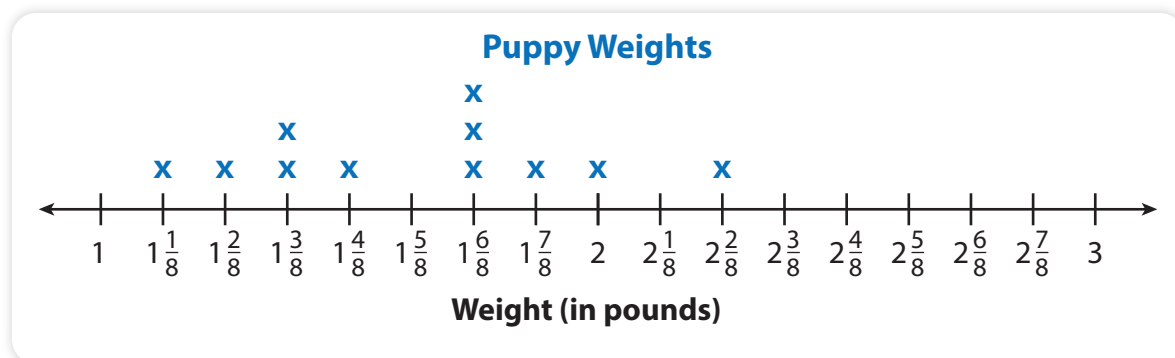Tom chose Ⓓ as the correct answer. How did he get that answer?

PAIR/SHARE
Does Tom's answer make sense?

4 The veterinarian at an animal shelter weighs the puppies every day. One day she records the weights in a line plot.

Puppy Weights

Weight (in pounds)

Use the line plot above to tell whether each sentence is *True* or *False*.

	True	False
The difference in weight between the two heaviest puppies is $\frac{1}{8}$ of a pound.	Ⓐ	Ⓑ
The combined weight of the two lightest puppies is $2\frac{2}{8}$ pounds.	Ⓒ	Ⓓ
The difference in weight between the heaviest puppy and the lightest puppy is $1\frac{1}{8}$ pounds.	Ⓔ	Ⓕ

5 In the line plot from problem 4, there are three puppies that weigh the same amount. What is the combined weight of those three puppies? Show your work.

Solution ....

6   Alexandra has a ribbon that is 50 inches long. She cuts off four pieces. The line plot below shows the lengths of the pieces she cuts off.

Ribbon Pieces

Length (in inches)
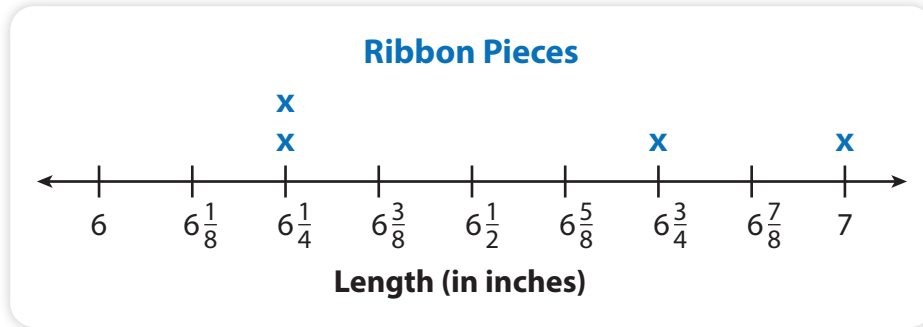
What is the total length of the four pieces? Show your work.

Solution ....

7 MATH JOURNAL

Write a different word problem for the line plot from problem 6 that you can solve by adding or subtracting mixed numbers. Explain how to find the answer.

☑ SELF CHECK   Go back to the Unit 4 Opener and see what you can check off.