

## Finding Area with Fractional Side Lengths - Direct Instructions Notes

What if our dimensions were fractions?...

Jessica has a small rug that is  $\frac{2}{5}$  ft long and  $\frac{1}{3}$  ft wide. What is the total area of her rug?

Draw it:

Solve it:

So:

Area: the amount of \_\_\_\_\_ a \_\_\_\_\_ figure takes up

Equations/How to Find: \_\_\_\_\_ x \_\_\_\_\_ or \_\_\_\_\_ x \_\_\_\_\_

Chloe is painting one part of her bedroom wall. The rectangle she wants to paint is  $\frac{3}{4}$  yds by 4 yds? How much of the wall is Chloe going to paint?

Draw it:

Solve it:

## Finding Area with Fractional Side Lengths - Guided Practice

The woods behind Adam's house were  $\frac{2}{3}$  miles wide and  $\frac{1}{5}$  miles long. What is the area of the woods?

Draw It:



Solve It:

Georgia has a new poster she wants to hang on her wall. The base was  $\frac{5}{8}$  feet and the height was 2 feet. What is the area of the poster?

Solve It:

Check with Model:

Mrs. Craver is choosing between two Harry Potter posters to hang up. Which of the following posters do you think she will choose? (Hint: She loves Harry Potter A LOT!)

Poster A:  $\frac{2}{5}$  meters x 3 meters

Poster B:  $\frac{5}{6}$  meters x  $\frac{2}{3}$  meters

Janet was cutting out some fabric for a friend. She cut a piece that was  $\frac{7}{8}$  centimeters wide and  $\frac{3}{4}$  centimeters long. What was the area of the fabric she cut out?

Draw it:

Solve it:

Write an addition statement that would also solve:

## Independent Practice

1-Millie was helping her teacher hang up a bulletin board in the classroom. They need to get paper that will cover a board that is 3 yards by  $\frac{7}{8}$  yards. How much paper will they need?

2-What is the area of a square with a side length of  $\frac{7}{10}$  cm? Draw a model to prove your answer.

3-Nick went online and to order a sticker. The sticker is  $\frac{2}{5}$  in by  $\frac{3}{4}$  in. He wants to know how much room the sticker will take on his notebook. How many square inches is the painting?

4-John is creating a new pasture on his farm. He has measured off a piece of land that is 4 acres by  $\frac{5}{6}$  acres. What is the total area of his new pasture? Create an addition and multiplication equation to solve.

- a.  $\frac{6}{10}$  in<sup>2</sup>
- b.  $\frac{3}{10}$  in<sup>2</sup>
- c.  $\frac{1}{2}$  in<sup>2</sup>
- d.  $\frac{1}{3}$  in<sup>2</sup>

5-A dog run at the park measures 22 meters long and  $\frac{2}{3}$  meters wide. What is the total area of space the dogs have to run?

Challenge: If the park decided to separate it into 2 equal parts, how big would each part be?