

KEY CONCEPT OVERVIEW

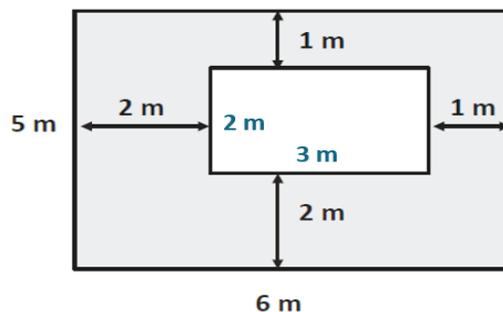
In Lessons 12 through 16, students apply their knowledge of area to real-world situations, such as working with floor plans. Students learn to solve word problems about area by using strategies they learned during their study of multiplication and division.

You can expect to see homework that asks your child to do the following:

- Solve word problems about area concepts.
- Find the area of a shaded region when a rectangular piece is cut out of a larger rectangle.
- Find the total area of combined rectangles when given the dimensions of some of the side lengths.
- Use a ruler to measure side lengths of rectangles, and then calculate the area.

SAMPLE PROBLEM (From Lesson 14)

The figure below shows a small rectangle within a big rectangle. Find the area of the shaded part of the figure.



The area of the large rectangle: $5 \text{ m} \times 6 \text{ m} = 30 \text{ sq m}$

The area of the small rectangle: $2 \text{ m} \times 3 \text{ m} = 6 \text{ sq m}$

I can subtract the areas of the two rectangles. The area of the shaded part is 24 square meters since $30 - 6 = 24$.

Additional sample problems with detailed answer steps are found in the *Eureka Math Homework Helpers* books. Learn more at GreatMinds.org.

HOW YOU CAN HELP AT HOME

- Have your child trace the rectangles from the homework in Lessons 13 and 14 onto a separate piece of paper and cut them out. Then your child can physically manipulate them to form the images on the homework page. The physical manipulation of shapes often helps students better understand the joining or separating of the areas. It can also be a good strategy to act out word problems in Lesson 12.
- Give your child some graph paper. (You can find free graph paper online to print, or ask your child’s teacher for some.) Ask your child to design a public place of her choice by using rectangles drawn to scale. She might choose to design a skate park, a mall, a community garden, or whatever else sparks her imagination. Help your child determine the side lengths of the rectangles and calculate the area of the design.