Topic 05 / Lesson 9

LESSON 5-9

Apply Properties: Area of Irregular Figures

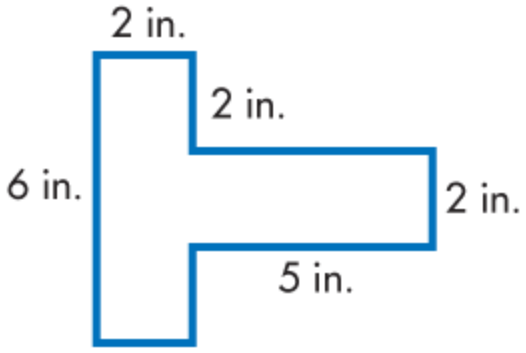
MA.3.GR.2.4, MA.3.GR.2.2, MA.3.NSO.2.4, MTR.3.1, MTR.4.1, MTR.5.1

For more help with this lesson, view the Visual Learning Animation or the Another Look Video.

MATH HELP AT HOME

Sample Additional Practice Exercise 1

Find the area of the irregular figure. Use grid paper to help.



22 square inches

Draw a line segment to divide the figure into two rectangles. Find the area of each rectangle: $6 \times 2 = 12$, and $5 \times 2 = 10$. Add the areas: $12 + 10 = 22$ square inches.

HOME ACTIVITY

Cut It Out

MATERIALS

Paper, Inch Ruler, Scissors, Pencil

ACTIVITY

Cut off a half-inch strip along one edge of a sheet of paper so that you start with an 8 in. by 11 in. rectangle. Using a ruler to measure, cut off a 4 in. by 5 in. rectangle from one corner. You and your child will find the area of this irregular figure using three different methods. All three results should match!

Method 1: Have your child use the ruler to draw a line segment that divides the figure into two rectangles. For each rectangle, help your child measure the two sides, multiply to find the area, and write the area inside the rectangle. Ask your child to add the two areas to find the total area of the irregular figure.

Method 2: Turn the paper over. Have your child draw a line segment that divides the figure into two different rectangles than before. Help your child measure the sides, write the areas inside the rectangles, and add to find the total area. Compare this result with the first one; they should be the same.

Method 3: Find the area of the irregular figure a third way. Subtract the part you cut out ($4 \times 5 = 20$) from the area of the original rectangle ($8 \times 11 = 88$). Ask your child to subtract the areas: $88 - 20 = 68$. This should match your other two results.