Apply Area Concepts to Solve Problems

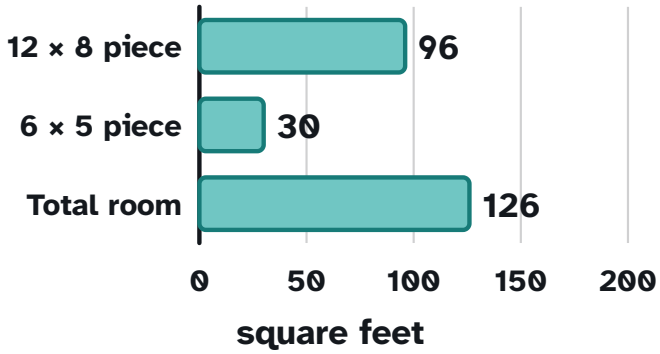
Find the area of a shape made of simple shapes by finding each piece, then adding or subtracting.

Name _____ **Date** _____

Tonight's spark

An L-shaped room splits into two rectangles. One is 12 feet by 8 feet. The other is 6 feet by 5 feet. How many one-foot floor tiles cover the whole room?

Guess first: more than 100 tiles, or fewer?



Our class model: break it apart, then add or subtract

Try it

Work it out on paper. Write one answer on each line.

1 **What is a composite figure?**

A. Only one rectangle **B.** A shape made of two or more simple shapes joined together
C. A shape with curved sides only **D.** A shape with no area

My answer _____

2 **An L-shape is split into a 5 by 2 rectangle and a 3 by 2 rectangle. What is the total area?**

A. 16 square units **B.** 8 square units **C.** 30 square units

My answer _____

3 **A 9 by 4 rectangle has a 3 by 2 rectangle cut out. What area is left?**

A. 42 **B.** 30 **C.** 6 **D.** 36

My answer _____

4 **To find the area of a figure with a hole cut out, what do you do with the hole's area?**

A. Add it **B.** Ignore it **C.** Subtract it **D.** Multiply it

My answer _____

5 **A regular hexagon is split into 6 equal triangles. Each triangle has an area of 9 cm². What is the area of the hexagon?**

A. 15 cm² **B.** 9 cm² **C.** 45 cm² **D.** 54 cm²

My answer _____

Talk about it

Which pieces did you add, and which piece did you subtract?

Home mission

Cut a square out of one corner of a sheet of paper to make an L. How could you split the L into two rectangles? Is there a second way to find its area?

If we get stuck, ask

- What simple shapes can we break this into?
- Are the pieces joined, or is one cut out?
- Let's find each area first, then decide to add or subtract.

Do it on a screen

Scan or type the link. Same lesson, with hints.

eduwonderlab.com/lessons/5-4/homework.html

How did it feel? (optional)

Tricky Getting there Got it