

Lesson 9-7

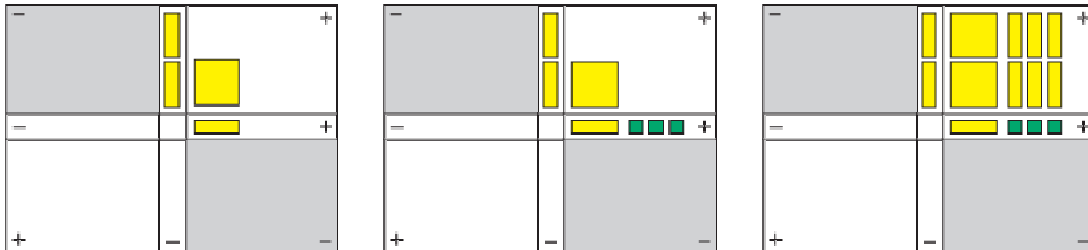
**Problem**

**CONSTRUCTION** Ms. Clarke’s office currently measures  $x$  feet by  $x$  feet. Her company plans to expand her office so that its length will double and its width will increase by 3 ft.

- a. Sketch or show the new office using Algeblocks.
- b. Find the area of the new office.

**Solve the Problem**

- a. First, represent the original office. Next add Algeblocks to represent the dimensions of the new office. Then complete the area of the new office.



- b. Total the Algeblocks to find the area of the new office.

$$x^2 + x^2 + x + x + x + x + x + x = 2x^2 + 6x$$

The area of the new office is  $2x^2 + 6x$  square feet.