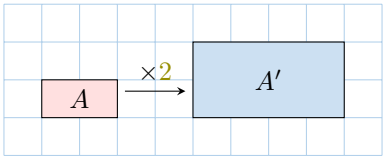
ENLARGEMENT AND REDUCTION

A DEFINITIONS

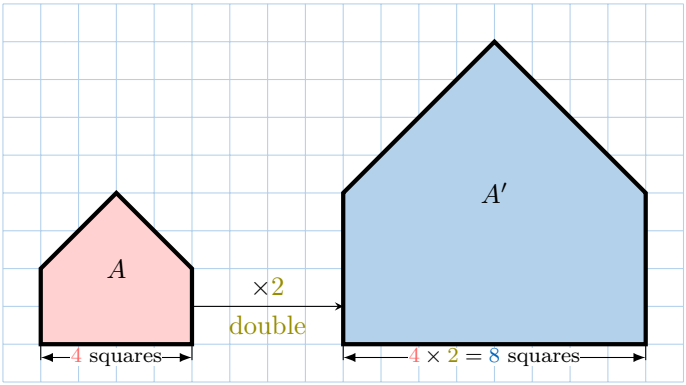
Discover: Look at the rectangles below. They have the same shape but different sizes because their side lengths grow or shrink by the same multiplier.



Rectangle A is enlarged to A' by doubling its side lengths (multiplying by 2). Notice how the width and height both double.

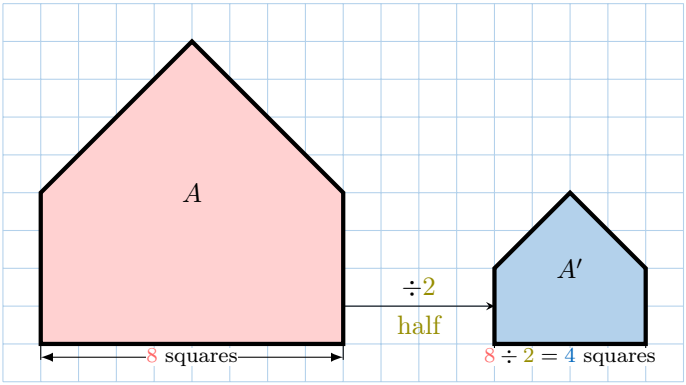
Definition **Enlargement and Reduction**

- An **enlargement** makes a shape larger by multiplying all side lengths by a number called the scale factor.



In this example, shape A is enlarged to A' by multiplying side lengths by 2 (scale factor = 2). The bottom side grows from 4 to 8 squares.

- A **reduction** makes a shape smaller by dividing all side lengths by a number called the scale factor.



In this example, shape A is reduced to A' by dividing side lengths by 2 (scale factor = 2). The bottom side shrinks from 8 to 4 squares.