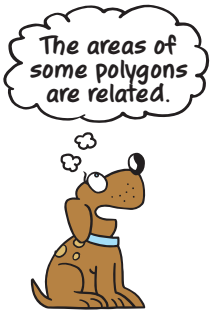
Related Areas

Name _____

Key Concept and Vocabulary



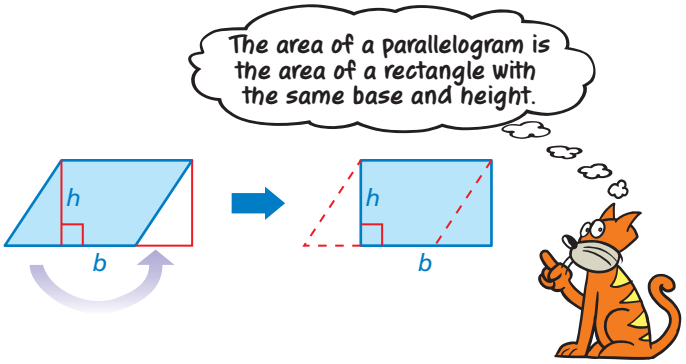
Triangle: $A = \frac{1}{2}bh$

Square: $A = b^2$

Rectangle: $A = bh$

Parallelogram: $A = bh$

Rhombus: $A = \frac{1}{2}d_1d_2$

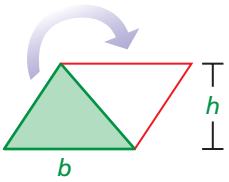


PRACTICE MAKES *PURR*-FECT™

Check your answers at BigIdeasMath.com.

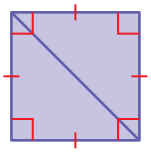
1. TRIANGLE How does the area of each triangle compare to the area of the parallelogram?

The area of each triangle is half the area of the parallelogram.



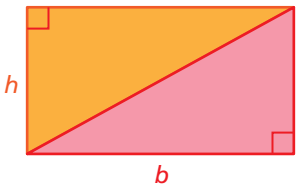
2. SQUARE How does the area of the square compare to the area of each triangle?

The area of the square is twice the area of each triangle.

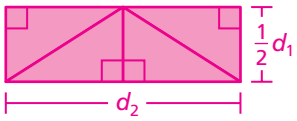


3. RECTANGLE How can you justify the area formula for a rectangle using a right triangle with the same base and height?

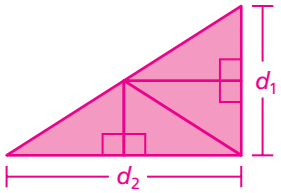
$$A = \frac{1}{2}bh + \frac{1}{2}bh = bh$$



4. RHOMBUS How can you rearrange the four right triangles to justify the area formula for a rhombus?



OR



$$A = bh = d_2\left(\frac{1}{2}d_1\right) = \frac{1}{2}d_1d_2$$

$$A = \frac{1}{2}d_1d_2$$