

Lesson 4 Assessment

Determining the Area of Triangles and Parallelograms

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Explains the relationships between the area of a rectangle and a triangle

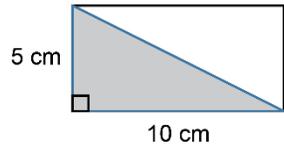
I drew a diagonal of the rectangle and divided the rectangle in two equal triangles.

Area rectangle = 50 cm^2

Area triangle = 25 cm^2

So, the area of a triangle is one-half the area of a rectangle.

$$A = b \times h \div 2$$



Uses triangle area formula to determine a missing measure

What is the base of a triangle with area of 36 cm^2 and height of 6 cm?

I used the area formula for a triangle.

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

$$36 = \frac{1}{2} \times b \times 6$$

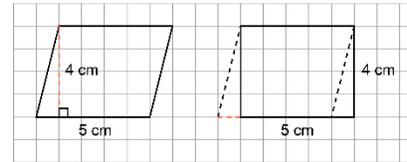
$$36 = 3 \times b$$

$$\frac{36}{3} = b$$

$$b = 12$$

The base of the triangle is 12 cm.

Explains the relationships between the area of a rectangle and a parallelogram



I cut a triangle from end of the parallelogram and moved it to the other end.

The area of the parallelogram was rearranged to form a rectangle, and no area was lost. So, the area of a parallelogram is the same as the area of a rectangle, 20 cm^2 .

$$A = b \times h$$

Uses parallelogram area formula to determine a missing measure

What is the base of a parallelogram with area of 36 cm^2 and height of 6 cm?

$$A = bh$$

$$36 = b \times 6$$

$$\frac{36}{6} = b$$

$$b = 6$$

The base of the parallelogram is 6 cm.

Observations/Documentation

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