

Lesson 4 Assessment

Determining the Area of Triangles

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

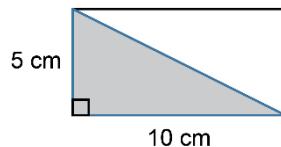
I drew a diagonal of the rectangle and divided the rectangle in two equal triangles.

$$\text{Area rectangle} = 50 \text{ cm}^2$$

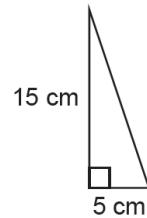
$$\text{Area triangle} = 25 \text{ cm}^2$$

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

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



Determines the area of a triangle using the area formula.



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

$$A = \frac{1}{2} \times 5 \times 15$$

$$A = 37.5$$

The triangle has an area of 37.5 cm^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.

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

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

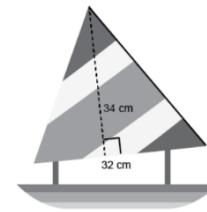
$$36 = 3 \times b$$

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

$$b = 12$$

The base of the triangle is 12 cm.

Flexibly solves problems involving the area of triangles.



What is the area of the sail on the toy boat?

"The sail is a triangle with base 32 cm and height 34 cm.

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

$$A = \frac{1}{2} \times 32 \times 34$$

$$A = 544$$

The area of the sail is 544 cm^2 .

Observations/Documentation