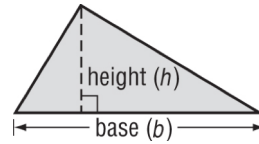


Area of Triangles

Words The area A of a triangle is one half the product of any base b and its height h .

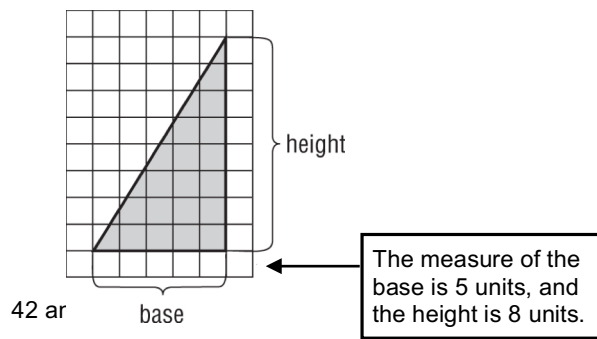
Symbols $A = \frac{1}{2}bh$ or $A = \frac{bh}{2}$

Model



Examples

1. Find the area.



sides by 2.

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

Area of a triangle

$$A = \frac{5 \times 8}{2}$$

Replace b with 5 and h with 8.

$$A = \frac{40}{2}$$

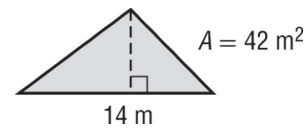
Simplify the numerator.

$$A = 20$$

Divide.

The area is 20 square units.

2. Find the height.



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

Area of a triangle

$$42 = \frac{14 \cdot h}{2}$$

Replace A with

$$42(2) = \frac{14 \cdot h}{2}(2)$$

Multiply both

$$84 = 14 \cdot h$$

Simplify.

$$\frac{84}{14} = \frac{14 \cdot h}{14}$$

Divide by 14.

$$6 = h$$

Simplify.

The height is 6 meters.