

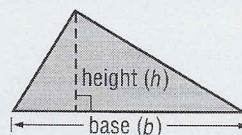
Lesson 2 Reteach

Area of Triangles

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

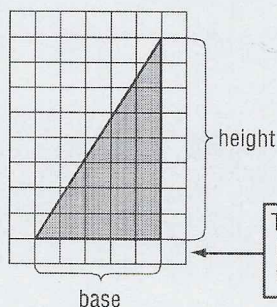
Symbols $A = \frac{1}{2}bh$ or $A = \frac{bh}{2}$

Model



Examples

1. Find the area.



The measure of the base is 5 units, and the height is 8 units.

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

Area of a triangle

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

Replace b with 5 and h with 8.

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

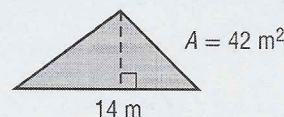
Simplify the numerator.

$$A = 20$$

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 and b with 14.

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

Multiply both sides by 2.

$$84 = 14 \cdot h$$

Simplify.

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

Divide by 14.

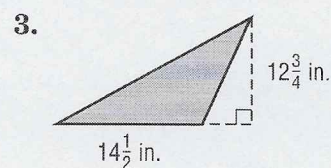
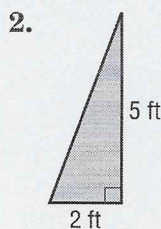
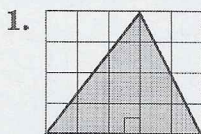
$$6 = h$$

Simplify.

The height is 6 meters.

Exercises

Find the area of each triangle.



Find the missing dimension.

4. height: 12 in., area: 24 in²

5. base: 15 m, area: 37.5 m²