

Perimeter and Area



The **perimeter** P of a figure is the distance around it.

Perimeter of a Square

$$P = s + s + s + s$$

$$= 4s$$

Perimeter of a Rectangle

$$P = \ell + w + \ell + w$$

$$= 2\ell + 2w$$

Perimeter of a Triangle

$$P = a + b + c$$

EXAMPLE Find the perimeter of the figure.

a. Square



$$P = 4s$$

$$= 4(9)$$

$$= 36 \text{ cm}$$

b. Rectangle

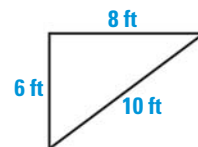


$$P = 2\ell + 2w$$

$$= 2(11) + 2(7)$$

$$= 22 + 14 = 36 \text{ m}$$

c. Triangle



$$P = a + b + c$$

$$= 6 + 8 + 10$$

$$= 24 \text{ ft}$$

The **area** A of a figure is the number of square units enclosed by the figure.

Area of a Square

$$A = s^2$$

Area of a Rectangle

$$A = \ell w$$

Area of a Parallelogram

$$A = bh$$

Area of a Triangle

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

Area of a Trapezoid

$$P = \frac{1}{2}(b_1 + b_2)h$$