

Area & Perimeter

| Polygon | # of Sides | # of Vertices |
|---------------|------------|---------------|
| Triangle | 3 | 3 |
| Quadrilateral | 4 | 4 |
| Pentagon | 5 | 5 |
| Hexagon | 6 | 6 |
| Octagon | 8 | 8 |

PERIMETER, CIRCUMFERENCE, AND AREA FORMULAS

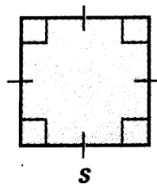
Formulas for the perimeter P , area A , and circumference C of some common plane figures are given below.

SQUARE

side length s

$$P = 4s$$

$$A = s^2$$

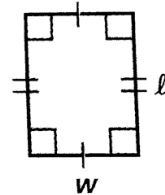


RECTANGLE

length l and width w

$$P = 2l + 2w$$

$$A = lw$$

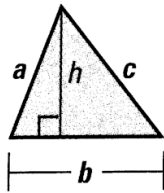


TRIANGLE

side lengths a , b , and c , base b , and height h

$$P = a + b + c$$

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

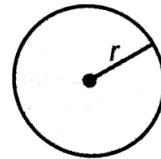


CIRCLE

radius r

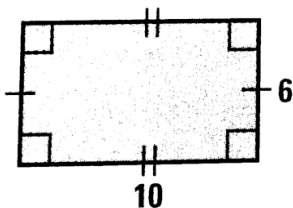
$$C = 2\pi r$$

$$A = \pi r^2$$



Pi (π) is the ratio of the circle's circumference to its diameter.

Find the Area and Perimeter

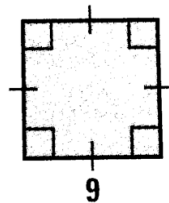


$$A = 6(10)$$

$$A = 60 \text{ square units}$$

$$P = 2(6) + 2(10)$$

$$P = 32 \text{ units}$$

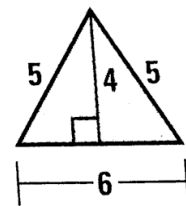


$$A = 9^2$$

$$A = 81 \text{ square units}$$

$$P = 4(9)$$

$$P = 36 \text{ units}$$



$$A = \frac{6(4)}{2}$$

$$A = 12 \text{ square units}$$

$$P = 5 + 5 + 6$$

$$P = 16 \text{ units}$$