

Perimeters of Polygons

Perimeters of Regular Polygons

Vocabulary

Geometry

- o The study of points, lines, angles, surfaces, and solids

Parallel

- o Lines that are always the same distance apart; parallel lines never meet

Polygon

- o A closed, many-sided figure that is made up of line segments

Quadrilateral

- o A polygon with four sides

Rectangle

- o A four-sided polygon with four right angles and the opposite sides equal

Rhombus

- o A four-sided polygon with two pairs of parallel sides having the same length

Regular Polygon

- o A polygon in which each side and each angle has the same measure

Scalene Triangle

- o A triangle with no equal sides

Isosceles Triangle

- o A triangle with two equal sides

Equilateral Triangle

- o A triangle with all three sides equal

Perimeter

- o A measure of the distance around a figure or shape
- o ADD ALL SIDES

EXAMPLES

Make sure to show the formula used and each step to receive full credit.
Label, label, label

1. Find the perimeter of a quadrilateral with sides measuring 3 inches, 4 inches, 5 inches, and 6 inches.

$$P = a + b + c + d$$
$$P = (3) + (4) + (5) + (6)$$
$$P = 18 \text{ inches}$$

**** IMPORTANT****

Notice in this example that 4 different variables are used, this shows that there are four different numbers being substituted in.

2. Find the perimeter of a square with sides measuring 6 centimeters.
(HINT: Square has 4 equal sides)

$P = s + s + s + s$		$P = 4s$
$P = (6) + (6) + (6) + (6)$		$P = 4(6)$
$P = 24 \text{ centimeters}$		$P = 24 \text{ centimeters}$

****IMPORTANT****

1. When all sides are equal, the same variable is used
2. Two different ways of doing the problem,
 - a. add up the sides
 - b. multiply by four as a short-cut

Textbook pages: 238 - 245