Geometry: Perimeter and Circumference

Vocabulary

Polygon	A simple closed geometric figure composed of three or more line segments

TYPE	SIDES	FIGURE	Perimeter: The distance around a polygon. Usually designated with the letter P
Triangle	3	, ,	P = a + b + c
Rectangle	4	T M	P = 2l + 2w
Square	4 equal sides	5	P = 4s
Parallelogram	4 sides with opposite sides parallel	<i>b</i>	P = 2s + 2b
Trapezoid	4 sides with exactly one pair of opposite sides is parallel	51 k 52	$P = s_1 + s_2 + b_1 + b_2$

Other terms:

Pentagon – a 5-sided polygon

Hexagon – a 6-sided polygon

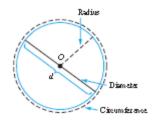
Decagon – a 10-sided polygon

TRY:

If one side of an octagon (an 8-sided regular polygon – meaning each side is the same size) is 5 ft, what is the perimeter?

If the three sides of a triangle measure 9", 8", and 14", what is the perimeter?

Circle – the perimeter is called a circumference; the diameter is a line segment that stretches from one side of the circle to the other passing through the center of the circle; the radius is the distance from the center of the circle to a point on the circle.



Circumference $C = 2\pi r$ or $C = \pi d$

TRY:

What is the circumference of a circle with diameter of 12"? Use 3.14 for π .

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