

Interior Angles in Regular Polygons

Match the number of sides to the name of the polygon.

Octagon	5
Pentagon	6
Heptagon	7
Hexagon	8
Decagon	9
Nonagon	10

- (a) Find the sum of the interior angles in a regular pentagon.
- (b) Find the sum of the interior angles in a regular octagon.
- (c) Find the sum of the interior angles in a regular decagon.
- (d) Find the sum of the interior angles in a 12-sided regular polygon.

- (a) The sum of the interior angles in a regular hexagon is 720° . Find the size of one interior angle in a regular hexagon.
- (b) Find the size of one interior angle in a regular nonagon.
- (c) Find the size of one interior angle in a regular 15-sided polygon.
- (d) Find the size of one interior angle in a regular 20-sided polygon.

- (a) A regular polygon has interior angles which sum to 900° . How many sides does the polygon have?
- (b) A regular polygon has interior angles which sum to 1980° . How many sides does the polygon have?
- (c) A regular polygon has interior angles which sum to 2880° . How many sides does the polygon have?

Interior Angles in Regular Polygons

Match the number of sides to the name of the polygon.

Octagon	5
Pentagon	6
Heptagon	7
Hexagon	8
Decagon	9
Nonagon	10

- (a) Find the sum of the interior angles in a regular pentagon.
- (b) Find the sum of the interior angles in a regular octagon.
- (c) Find the sum of the interior angles in a regular decagon.
- (d) Find the sum of the interior angles in a 12-sided regular polygon.

- (a) The sum of the interior angles in a regular hexagon is 720° . Find the size of one interior angle in a regular hexagon.
- (b) Find the size of one interior angle in a regular nonagon.
- (c) Find the size of one interior angle in a regular 15-sided polygon.
- (d) Find the size of one interior angle in a regular 20-sided polygon.

- (a) A regular polygon has interior angles which sum to 900° . How many sides does the polygon have?
- (b) A regular polygon has interior angles which sum to 1980° . How many sides does the polygon have?
- (c) A regular polygon has interior angles which sum to 2880° . How many sides does the polygon have?