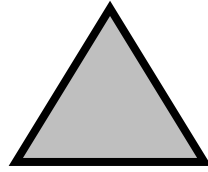


# GEOMETRY The Amazing Attributes of Polygons!

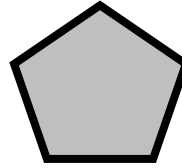
**polygon:** a flat or plane, two-dimensional closed shape with straight sides.

**Two-dimensional:** simple figures which have height and width but no depth (2D).

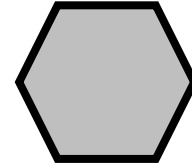
## COMMON POLYGONS



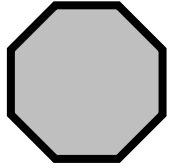
**TRIANGLE**  
3 sides & 3 angles



**PENTAGON**  
5 sides & 5 angles



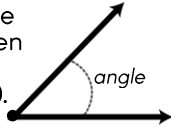
**HEXAGON**  
6 sides & 6 angles



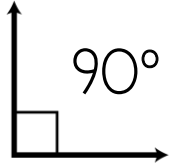
**OCTAGON**  
8 sides & 8 angles

## TYPES OF ANGLES

An angle measures the amount of turn between two lines around their common point (vertex).



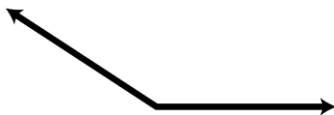
A **protractor** is used to measure angles!



**RIGHT ANGLE**  
exactly 90 degrees



**ACUTE ANGLE**  
less than 90 degrees



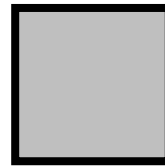
**OBTUSE ANGLE**  
more than 90 degrees



**STRAIGHT ANGLE**  
exactly 180 degrees

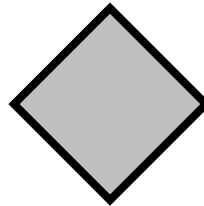
## Quadrilaterals

"quad" means 4



### SQUARE

- 4 sides & 4 right angles
- all sides have equal length
- opposite sides are parallel



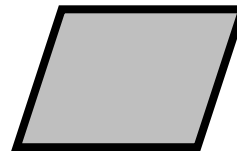
### RHOMBUS

- 4 sides
- opposite angles are congruent
- all sides have equal length
- opposite sides are parallel



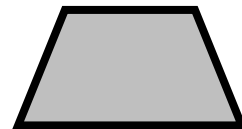
### RECTANGLE

- 4 sides & 4 right angles
- opposite sides have equal length
- opposite sides are parallel



### PARALLELOGRAM

- 4 sides & 4 angles
- opposite angles are congruent
- opposite sides have equal length
- opposite sides are parallel



### TRAPEZOID

- 4 sides & 4 angles
- one pair of parallel sides

**plane shape:**  
a closed two-dimensional, or flat, figure.

**congruent:**  
exactly equal in size, measurement, and shape.

**parallel:**  
2 lines that are equal distance from each other and never meet.

