

ADJACENT ANGLES: Two angles that share a common side and vertex


Two angles next to each other!

${ }^{3}$ COMPLEMENTARY ANGLES $=90^{\circ}$ :
Two angles whose sum of their measures is 90 degrees


CONGRUENT POLYGONS:
Polygons that have that same size and same shape


CORRESPONDING ANGLES: Two angles that
occupy the same positions when a transversal intersects 2 lines


DIAMETER: The distance across the circle through the center


EQUILATERAL TRIANGLE: A triangle with all equal sides


right triangle
HYPOTENUSE: The side opposite the right angle in a right triangle

a RIGHT TRIANGLE
LEG: The sides that form the right angle in a right triangle
(the sides of a right triangle that are not the hypotenuse)


LINE OF SYMMETRY: A line that divides the figure into 2 parts that are reflections of each other


Obtuse Angle
An angle greater than 90 degrees, but less than 180


## PARALLEL LINES

Lines in the same plane that do not intersect
PERFECT SQUARE: A number that is the square of an integer

$$
(-4)^{2}=16 \quad(-3)^{2}=9 \quad(-2)^{2}=4 \quad 5^{2}=25 \quad 6^{2}=36 \quad 7^{2}=49
$$



PERPENDICULAR LINES: Two lines that intersect to form $\mathbf{4}$ right angles
POLYGON: A closed plane figure whose sides are segments intersecting only at their endpoints


Triangle


Heptagon

Square


Octagon


Pentagon


Nonagon


Hexagon


Decagon
In a Right Triangle, the sum of the squares of the Legs equals the square of the Hypotenuse
$\sqrt{64 x^{3} y^{9}}$

RADICAL EXPRESSION: An expression that contains a square root
( $\sqrt{ }$ square root symbol $)$


RADIUS: The distance between the center and any point on a circle


REFLECTION: A transformation in which a figure is flipped over a line

## REGULAR POLYGON:

a polygon in which all the angles are equal, and all the sides are equal.


Triangle


Square
Pentagon


Hexagon

$90^{\circ}$
RIGHT ANGLE: An angle whose measure is 90 degrees


ROTATION: A transformation in which a figure is rotated through a given angle, about a point.
Scalene: All 3 Sides Are Different


SCALENE TRIANGLE: A triangle with no equal sides


## SIMILAR POLYGONS:

Polygons that have the same shape but not necessarily the same size



SUPPLEMENTARY ANGLES $=180^{\circ}$ Two angles are supplementary if their sum is $\mathbf{1 8 0}$ degrees.



TESSELLATION: A plane covered with a repeating pattern of one or more shapes with no gaps or overlaps


TRANSLATION: A transformation or change in which each point of a figure moves the same distance in the same position.

$\mathbf{a}^{\circ}=\mathbf{b}^{\circ}$ Vertical angles are equal
Vertical Angles: Angles that are opposite each other when 2 lines intersect


TRAPEZOID: A quadrilateral with exactly 1 pair of parallel sides


PARALELLOGRAM: A quadrilateral with both pairs of opposite sides parallel.
$\qquad$

RHOMBUS: A parallelogram with four congruent (equal) sides


RECTANGLE: A parallelogram with four right $\left(90^{\circ}\right)$ angles


SQUARE: A parallelogram with four congruent sides and four right angles


Triangle: A polygon with three sides


Pentagon 5 sided polygon


Hexagon 6 sided polygon


Heptagon 7 sided polygon


Octagon 8 sided polygon


Nonagon 9 sided polygon


Decagon 10 side polygon

