



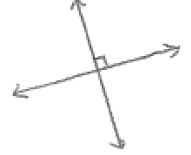
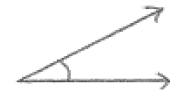
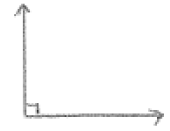


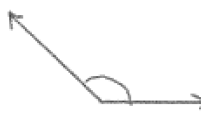


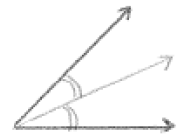
Geometry Theorems

Theorem	Complementary Angles (CAT)	Supplementary Angles (SAT)	Reflex Angles (RAT)	Opposite Angles X-pattern
Diagram				
Rule	Add to 90°	Add to 180°	Add to 360°	Are equal
Theorem	see (★)	see (✱)	Equilateral Triangle (ETT)	Isosceles Triangle (ITT)
Diagram				
Rule	All add to 180°	All add to 360°	All are 60°	Two angles equal
Theorem	Exterior Angle of Triangle (EATT)	see (★)	see (✱)	Sum of Interior Angles (SIAT)
Diagram				
Rule	$Z = X + Y$	All add to 360°	All add to 360°	$n = \# \text{ of sides}$ Sum = $180^\circ(n-2)$
Theorem	Sum of Exterior Angles (SEAT)	Alternate Angles Z-pattern	Corresponding Angles F-pattern	Co-Interior Angles C-pattern
Diagram				
Rule	All add to 360°	Are equal	Are equal	Add to 180°

Lines and Angles

Line	Line Segment	Ray
		
Description: A straight line that continues on forever in both directions	Description: A piece of a line with two fixed ends	Description: A piece of a line with one fixed end and one end that continues on forever

Parallel Lines	Perpendicular Lines	Acute Angle	Right Angle
			
Description: Two lines that are evenly spaced and never cross	Description: Lines that cross at 90°	Description: Angle between 0° and 90°	Description: 90° Angle

Obtuse Angle	Straight Angle	Reflex Angle	Angle Bisector
			
Description: Angle between 90° and 180°.	Description: 180° Angle (straight line)	Description: Angle bigger than 180°	Description: A ray that cuts an angle in half.

Properties of Triangles

Midsegment of triangle is _____ to the opposite side

Midsegment is _____ the length of the parallel side.

Drawing all 3 midsegments of a triangle cuts the triangle into _____ equal pieces.

Properties of Quadrilaterals

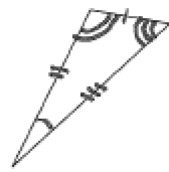

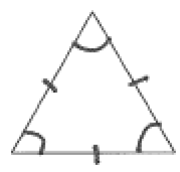
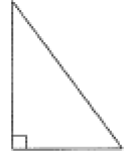
A – diagonals bisect each other

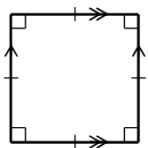
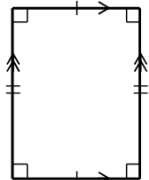
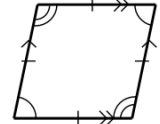
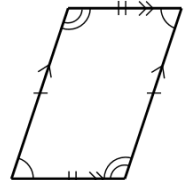
B – diagonals are at 90°

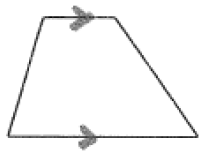

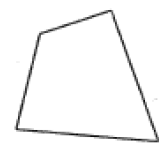
C – diagonals bisect the vertex angles

Inscribed polygon made of midsegments is always a _____

Shapes

			
Scalene	Isosceles	Equilateral	Right-Angled
Characteristics: • No equal sides • No equal angles	Characteristics: • 2 equal sides • 2 equal angles	Characteristics: • 3 equal sides • 3 equal angles	Characteristics: • Has a 90° angle

			
Square	Rectangle	Rhombus	Parallelogram
Description: • 4 equal sides • 4 equal angles (90°)	Description: • opposite sides are equal • 4 equal angles (90°)	Description: • 4 equal sides • opposite corners are the same angle	Description: • opposite sides are equal • opposite corners are the same angle

		
Trapezoid	Kite	Quadrilateral
Description: • 2 parallel sides	Description: • Adjacent sides equal • 1 pair of equal angles	Description: • 4 sides