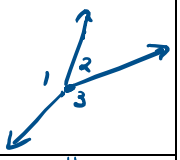
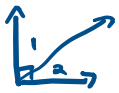
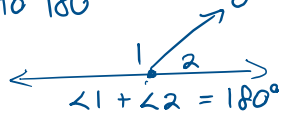
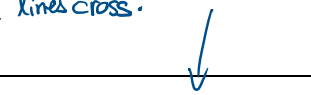
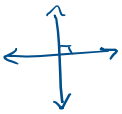
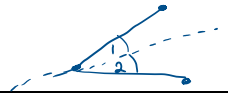
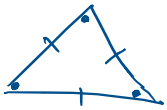
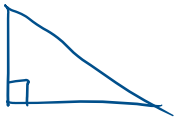
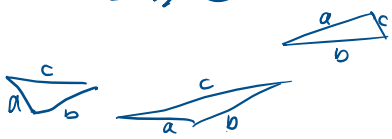
Date _____ Foundations Math 11

Geometric Properties

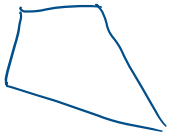
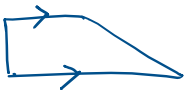
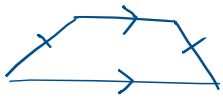
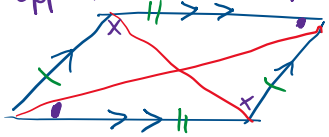
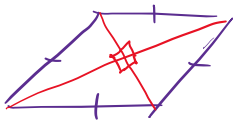
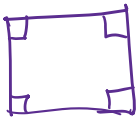
Angle Properties

Acute an angle $< 90°$ 	Straight $= 180°$ 	Angles at a point Add to 360°  $\angle 1 + \angle 2 + \angle 3 = 360°$
Obtuse angle $> 90° < 180°$ 	Complimentary 2 angles that add to 90°  $\angle 1 + \angle 2 = 90°$	Angles on a line more than 2 angles that add to 180°  $\angle 1 + \angle 2 + \angle 3 + \angle 4 = 180°$
Right $= 90°$ 	Supplementary 2 angles that add to 180°  $\angle 1 + \angle 2 = 180°$	Vertically opposite angles angles across from each other when 2 lines cross. 
Perpendicular 2 lines that cross at 90° 	Angle Bisector A line that splits an angle in 2 equal parts $\angle 1 = \angle 2$ 	

Triangle Properties

Scalene - all side lengths are different (and angles). 	Isosceles - 2 sides + 2 angles are the same 	Equilateral - all sides + angles are equal 
Acute Triangle - all angles less than 90° 	Obtuse Triangle at least one angle more than 90° and less than 180°. 	Right Triangle - has one angle that is 90° 
Angle Sum - all angles in a $\triangle$ add to 180°	Triangle Inequality Theorem $a + b \geq c$ 	

Quadrilateral Properties

Quadrilateral - shape w/ 4 sides - all sides add to 360° 	Trapezoid - one set of parallel lines.   "isosceles trapezoid"	Parallelogram - 2 sets of parallel lines. - diagonals bisect each other. - 2 sets of equal lengths. - opposite vertices are equal 
Rectangle - same as parallelogram - all angles = 90° 	Rhombus - same as parallelogram - all sides are equal - diagonals bisect at 90° 	Square - same as rhombus - all angles = 90° 

congruent - same shape + size

similar - same shape but different size.