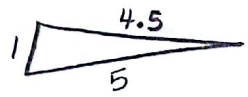
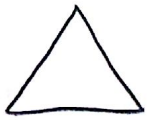
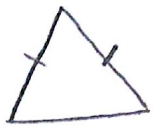
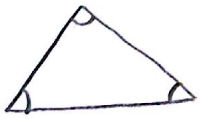
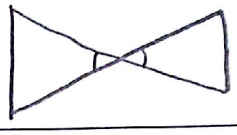
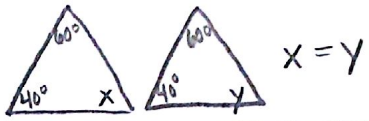
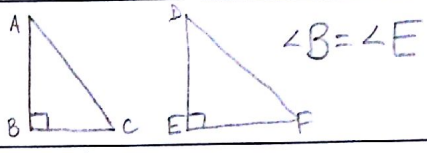
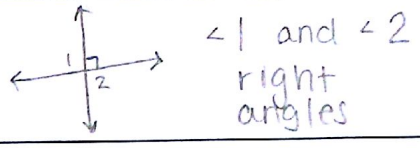
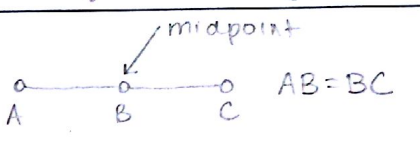
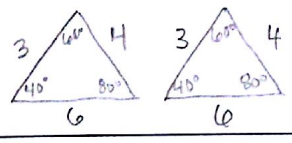
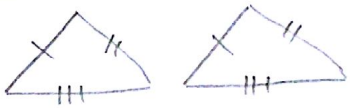
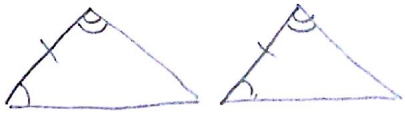
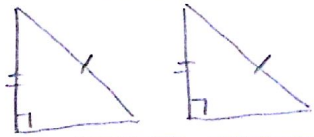
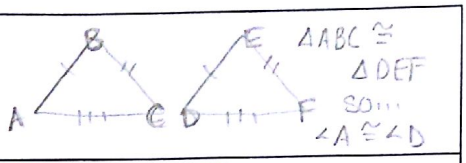
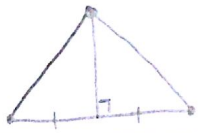
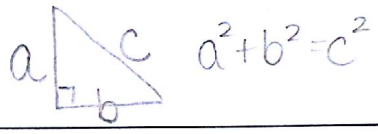
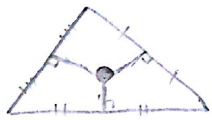
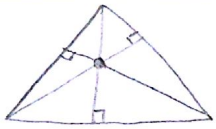
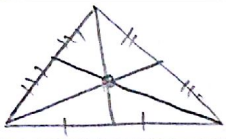
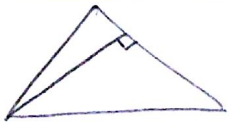
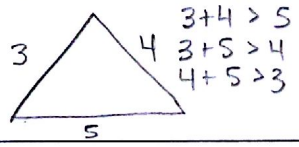
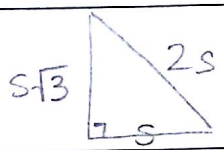
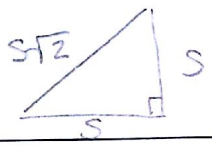
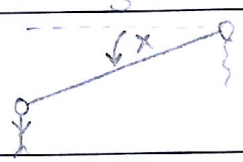
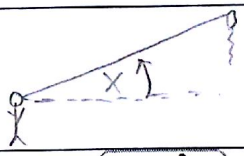
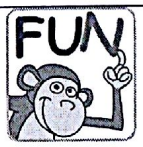
conditional	If A, then B	If it rains, then I use an umbrella
Converse	If B, then A	If I use an umbrella, then it rains
Inverse	If not A, then not B	If it does not rain, then I do not use an umbrella
contrapositive	If not B, then not A	If I do not use an umbrella, then it does not rain
biconditional	If and only if	I use an umbrella if and only if it rains
Law of detachment	If A, then B. Given: A Conclude: B	If I am hungry, then I eat pizza. I am hungry. I will eat pizza.
Law of syllogism	If A, then B; And if B, then C; So if A, then C.	If I am hungry, then I eat pizza. If I eat pizza, then I eat Jets. If I am hungry, then I eat Jets.
Scalene	All 3 sides different lengths	
Acute	All angles less than 90 degrees	
Equilateral	All 3 sides equal	
Obtuse	One angle bigger than 90 degrees	
Right	One 90 degree angle	
Triangle	3 sides	

Isosceles	2 sides equal	
Equiangular	All 3 angles equal	
Vertical angle theorem	Vertical angles are equal	
Third angel theorem	If two sets of angles are equal, the third set is equal	
Definition of right angles	Right angles are equal in measure	
Definition of perpendicular lines	Perpendicular lines create right angles	
Definition of midpoint	A midpoint cuts a segment in equal halves	
Congruent triangles	Triangles that have the same length sides and the same measures of angles	
SSS	All 3 sets of sides are congruent	
SAS	Two sets of sides are congruent, as well as the angle between	
AAS	Two angles are congruent as well as the set of sides that follow	
ASA	Two angles are congruent as well as the side in between	
HL	Two right triangles are congruent because the hypotenuse and leg are equal	

CPCTC	Corresponding parts of congruent triangles are congruent	
Triangle midsegment	Little guy is half of the big guy	
Perpendicular bisector in a triangle	Point on ***this*** is same distance from endpoints of the segment it bisects.	
Angle bisector in a triangle	Point on ***this*** is the same distance from the sides of the angle it bisects.	
Pythagorean	a squared plus b squared equals c squared.	
Circumcenter	Where the perpendicular bisectors of a triangle intersect	
Incenter	Where the angle bisectors of a triangle intersect	
Orthocenter	Where the altitudes of a triangle intersect	
Centroid	Where the medians of a triangle intersect	
Median	From vertex to middle of side of triangle	
Altitude	Height	
Triangle inequality rule	Sum of two sides must be greater than 3rd side	
Ratio	Compare 2 things	5 : 3

proportion	Compare 2 ratios	$\frac{10}{2} = \frac{20}{4}$
Similarity statement	States two triangle are similar in the order in which their parts match up	$\triangle ABC \sim \triangle DEF$
Equivalence statement	States two triangle are congruent in the order in which their parts match up	$\triangle ABC \cong \triangle DEF$
special right triangle	30-60-90	
Special right triangle	45-45-90	
Angle of Depression	Angle below horizontal	
SOH-CAH-TOA	Trig stuff	$\sin\theta = \frac{O}{H}$ $\cos\theta = \frac{A}{H}$ $\tan\theta = \frac{O}{A}$
Angle of Elevation	Angle above horizontal	
Geometry	Super duper fun	
Square	4 equal sides	
Circle	No sides