Key Terms...

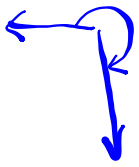
Acute angle - measure is between 0° and 90°

Right angle - measure is 90°; the two rays are perpendicular to each other

Obtuse angle - measure is between 90° and 180°

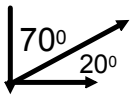
Straight angle - measure is 180°

Reflex angle - measure is between 180° and 360°

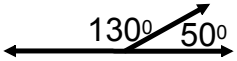


Angle Theorems

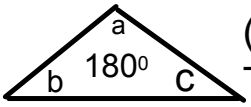
(OAT) **Opposite Angle Theorem - If two lines intersect then the opposite angles are equal**



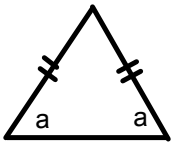
(CAT) **Complementary Angle Theorem -** Two angles add up to 90^0



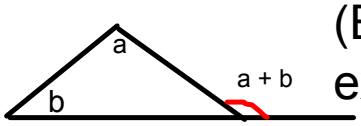
(SAT) Supplementary **Angle Theorem -** Two angles add up to 180^0



(SATT) **Sums of the Angles in a Triangle Theorem -** The angles in a triangle add up to 180^0

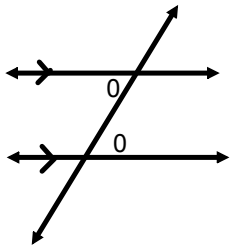


(ITT) **Isosceles Triangle Theorem -** The angles opposite the equal sides are equal



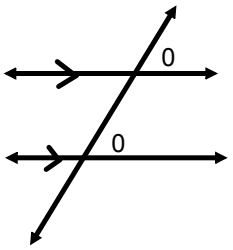
(EAT) **Exterior Angle Theorem** - An exterior angle of a triangle is equal to the sum of the interior and non-adjacent angles.

Traversal Parallel Theorems



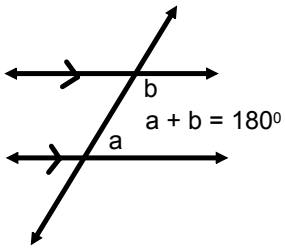
(AIA) **Alternate Interior Angles** - When a transversal intersects a set of parallel lines, the alternate interior angles are equal.

Note: Z pattern.



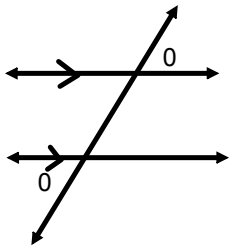
(CA) **Corresponding Angles** - When a transversal intersects a set of parallel lines, the corresponding angles are equal.

Note: F pattern.



(CIA) **Co-interior Angles** - When a transversal intersects a set of parallel lines, the co-interior angles sum to 180^0.

Note: C pattern

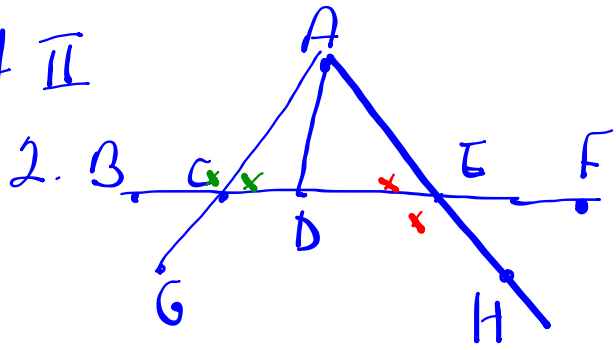


(AEA) **Alternate Exterior Angles** - When a transversal intersects a set of parallel lines, the alternate exterior angles are equal.

Labelling Angles

Part II

2.



a) ∠AED
&
∠DEH

∠ACB + ∠ACD

- Use three letters
- ∠ is the middle letter