Geometry – Facts

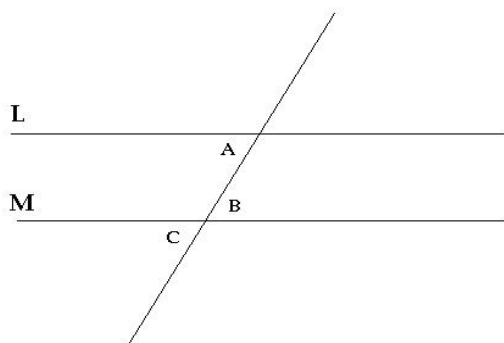"*Fact*": A straight angle measures 180°

A Straight Angle

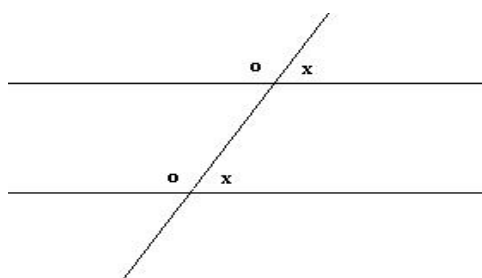"*Fact*": Alternate angles are equal in measure when formed by two parallel lines intersecting a third line.
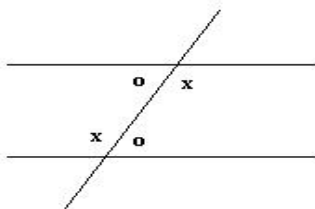
"*Fact*": In the diagram below:
(a) If $|\angle A| = |\angle B|$ then line L || line M
(b) If $|\angle A = |\angle C|$ then line L || line M

"*Fact*": Corresponding angles are equal in measure when formed by two parallel lines intersecting a third line.

"*Fact*": Two triangles are **congruent** (IDENTICAL) if they satisfy any one of the following four conditions:
• Three sides in one equal in measure to three sides in the other (**SSS**)
• Two sides and the included angle in one equal in measure, respectively, to two sides and the included angle in the other (**SAS**)
• Two angles and a side in one equal in measure, respectively, to two angles and a corresponding side in
the other (**ASA**)
• A right angle, hypotenuse and a side equal in measure, respectively, in each (**RHS**)

"*Fact*": If in a triangle two sides are of unequal length, then the angles opposite these sides are unequal in measure and the larger angle is opposite the longer side.

"*Fact*": Any two sides of a triangle are together greater in measure than the third side.

"*Fact*": The area of any rectilinear figure is equal to the sum of the areas of any two non-overlapping rectilinear figures of which it is composed.

"*Fact*": The area of a rectangle = length × breadth.