Geometry Info Sheet #4

Types of Angles; Angle Bisectors, Relationships, and Congruency

Definitions

Linear Pair:	Two angles formed by the endpoint of a ray on a line	
Degree:	The unit of angle measure that results when a circle is divided into 360 equal par	
Straight Angle:	An angle with a measure of exactly 180 degrees	
Reflex Angle:	An angle with a measure greater than 180 degrees	
Right Angle:	An angle with a measure of exactly 90 degrees	
Acute Angle:	An angle with a measure less than 90 degrees	
Obtuse Angle:	An angle with a measure greater than 90 degrees and less than 180 degrees	

Two angles are **<u>complementary</u>** if the sum of their measures is 90 degrees. Each angle is called the **<u>complement</u>** of the other.

Two angles are **<u>supplementary</u>** if the sum of their measures is 180 degrees. Each angle is called the **<u>supplement</u>** of the other.

An **angle bisector** is a ray, line, segment, or plane that divides an angle into two congruent angles.

Postulates

Angle Congruence Postulate:	If two angles have the same measure, then they are congruent. If two angles are congruent, then they have the same measure.
Angle Addition Postulate:	If point S is in the interior of $\angle PQR$, then the measure of angle PQS plus the measure of angle SQR equals the measure of angle PQR (m $\angle PQS$ + m $\angle SQR$ = m $\angle PQR$).

Properties

Linear Pair Property:

If two angles form a linear pair, then they are supplementary.