Name:

# Ch. 3 Def. Quiz B Study Guide

# **Congruent Angles**

Angles that have the same measure.

# Angle addition postulate

small angle + small angle = big angle

#### **Complementary angles**

Two angles whose sum is 90<sup>0</sup>

#### Supplementary angles

Two angles whose sum is 180<sup>°</sup>

# **Adjacent angles**

Two angles that share a common vertex or side, but have no common interior points (next to each other)

#### Linear pair

Two angles that are adjacent and supplementary.

#### **Vertical angles**

Two angles are vertical angles if their sides form two pairs of opposite rays. (across from each other)

#### **Right angles congruence theorem**

All right angles are congruent.

#### Linear pair postulate

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

#### Vertical angles congruence theorem.

Vertical angles are congruent.

# **Corresponding Angle Postulate**

If two parallel lines are cut by a transversal, then the pairs of corresponding angles are congruent.

# Alternate Interior Angles Theorem

If two parallel lines are cut by a transversal, then the pairs of alternate interior angles are congruent.

# **Consecutive Interior Angles Theorem**

if two parallel lines are cut by a transversal, then the pairs of consecutive interior angles are supplementary.

# **Corresponding Angles Converse**

If two lines are cut by a transversal so the corresponding angles are congruent, then the lines are parallel.

# **Alternate Interior Angles Converse**

If two lines are cut by a transversal so the alternate interior angles are congruent, then the lines are parallel.

#### **Alternate Exterior Angles Converse**

If two lines are cut by a transversal so the alternate exterior angles are congruent, then the lines are parallel.

#### **Consecutive Interior Angles Converse**

If two lines are cut by a transversal so the consecutive interior angles are supplementary, then the lines are parallel.

# **Transitive Property of Parallel Lines**

If two lines are parallelto the same line, then they are parallel to each other.

# **Slopes of Parallel Lines**

Parallel lines have the same slope.

# **Slopes of Perpendicular Lines**

The slopes of perpendicular lines have a product of -1.