**Chapter 2 & 3 “I Can” Statements**

You can use these statements as a study guide. You should focus your study time on the items where you circled “not sure.” Studying for math includes reviewing notes *and* trying additional problems. (Remember that the answers to odd problems are in the back of the book. Don’t forget that there is also a practice chapter 3 test online at the textbook’s website: <http://www.geometryonline.com>.)

Circle one Statement

Yes or Not Sure I can solve an equation in a 2-column format, showing a reason for each step.

Yes or Not Sure I can prove statements about line segments in a 2-column format.

Yes or Not Sure I can prove statements about angles in a 2-column format.

Yes or Not Sure I can explain what all the reasons from chapters 2 and 3 let me do in a proof. (See back.)

Yes or Not Sure I can set up an equation from a diagram that shows vertical angles or a linear pair.

Yes or Not Sure I can use a diagram to identify the intersection of 2 planes.

Yes or Not Sure I can identify parallel planes in a diagram.

Yes or Not Sure I can identify parallel line segments in a diagram.

Yes or Not Sure I can identify skew line segments in a diagram.

Yes or Not Sure I can identify a transversal when I am given 2 angles in a diagram containing many lines.

Yes or Not Sure I can identify corresponding, alternate interior, alternate exterior, consecutive interior, and consecutive exterior angles in a diagram containing many lines.

Yes or Not Sure I can identify pairs of congruent and pairs of supplementary angles when the lines crossing a transversal are parallel.

Yes or Not Sure I can use relationships between angles along a transversal to set up equations when the lines crossing the transversal are parallel.

Yes or Not Sure I can find the slope of a line that is graphed on a coordinate plane.

Yes or Not Sure I can find the slope of a line passing through 2 points using the slope formula.

Yes or Not Sure I can find the slope of a line that is either parallel or perpendicular to a line whose slope I know.

Yes or Not Sure I can use the slope formula to decide whether 2 lines are parallel, perpendicular, or neither.

Yes or Not Sure I can graph a line with a given slope passing through a given point.

Yes or Not Sure I can use the graph of a line to write its equation in slope-intercept form.

Yes or Not Sure I can use the slope of a line and a point on the line to write an equation in point-slope form.

Yes or Not Sure I can get an equation that starts in point-slope form into slope-intercept form.

Yes or Not Sure Given information about 2 angles in a diagram with many lines, I can determine which, if any , lines are parallel, and I can provide the appropriate reason to support my claim.

Yes or Not Sure I can use angle relationships to set up an equation that would guarantee that 2 lines are parallel.

Yes or Not Sure I can explain the difference between a theorem and its converse.

Yes or Not Sure I can prove that angles are congruent or supplementary when I know that 2 lines are parallel.

Yes or Not Sure I can prove that lines are parallel if I have sufficient information about the angles in a diagram.

Yes or Not Sure I can draw a line segment representing the distance between a point and a line.

Yes or Not Sure I can draw a perpendicular line between a point and a line on a graph and use it to find the distance between them.

Yes or Not Sure I can use substitution to find the coordinates of a point where two lines cross.

Yes or Not Sure I can find the distance between two parallel lines.

**Chapter 2 & 3 List of Reasons**

Reflexive Property of Equality/Congruence

Symmetric Property of Equality/Congruence

Transitive Property of Equality/Congruence

Addition Property of Equality Supplement Theorem

Subtraction Property of Equality Vertical Angles Theorem

Multiplication Property of Equality Definition of ‘Supplementary’

Division Property of Equality Definition of ‘Complementary’

Distributive Property Definition of Perpendicular Lines

Substitution Property of Equality Definition of ‘Right Angle’

Definition of ‘Midpoint’ Definition of ‘Linear Pair’

Definition of Congruent Line Segments Definition of Congruent Angles

Segment Addition Postulate Angle Addition Postulate

Definition of Segment ‘Bisector’ Definition of Angle ‘Bisector’

Corresponding Angles Postulate Converse of the Corresponding Angles Postulate

Alternate Interior Angles Theorem Converse of the Alternate Interior Angles Theorem

Alternate Exterior Angles Theorem Converse of the Alternate Exterior Angles Theorem

Consecutive Interior Angles Theorem Converse of the Consecutive Interior Angles Theorem

Consecutive Exterior Angles Theorem Converse of the Consecutive Exterior Angle Theorem

Perpendicular Transversal Theorem