Section 1.1 Linear and Quadratic Equations in One Variable

• Know and be able to apply the properties of equality (addition and multiplication) and the zero-factor property in order to solve equations.
• Understand the definition of the solution set of an equation.
• Know and apply the methods necessary to solve linear and quadratic equations in one variable (solving by factoring).
• Be able to eliminate fractions and decimals from equations by multiplying.
• Be able to recognize equations with no solution and equations that are identities.

Section 1.2 Formulas

• Know what a formula is, and be able to evaluate formulas given values for the variables.
• Be able to solve for a single variable in formulas or various types.
• Know basic geometric formulas, such as formulas for perimeter and area.
• Be able to solve percent problems.

Section 1.3 Application Problems

• Know and be able to carry out the blueprint for problem solving.
• Be careful to begin each application problem by defining all the variables used.
• End by stating your solution in a sentence describing how it relates to the original situation.

Section 1.4 Linear Inequalities in One Variable

• Know the properties of inequalities. Pay special attention to multiplication where you need to reverse the inequality.
• Be able to graph the solution to a linear inequality on a number line.
• Be able to express the solution to a linear inequality in interval notation.
• Understand compound inequalities - both the "and" case and the "or" case.

Section 1.5 and 1.6 Absolute Value Equations and Inequalities

• Know how to solve absolute value equations by splitting into two cases, including equations with more than one absolute value sign.
• Be able to recognize absolute value equations and inequalities that have no solution and those that are always true.
• Be able to solve absolute value inequalities by splitting into two cases.
• Know how to write absolute value inequalities as compound inequalities.

Section 2.1 and 2.2 Paired Data, Cartesian Coordinates, and the Slope of a Line

• Understand the Cartesian plane, including the origin and the four quadrants.
• Understand ordered pairs and be able to graph them.
• Know the definition of a linear equation in two variables, be able to graph lines and find the x and y-intercepts of a line.
• Memorize the slope formula, understand the idea of slope, and be able to find the slope of a line given two points on the line.
• Be able to recognize the equations of horizontal and vertical lines and be able to graph them.
• Understand the relationship between the slopes of parallel and perpendicular lines.

Practice Problems: Chapter 1 Review p. 169-171 # 3, 7, 9, 11, 15, 16, 17, 20, 26, 30, 35, 39, 42, 47, 52, 55, 57, 60, 63, 66
Practice Problems: Chapter 2 Review p. 269 # 1, 2, 3, 5, 7, 10, 13