

California State University San Marcos
Math 051
Intermediate Algebra
Fall 2003
ALEKS Assignment 2 Topics (88 of 227 topics)

- All Topics From Assignment 1
- Real Numbers and Linear Equations
 - Solving Linear Equations
 1. Word problem on linear equations: Problem type 1
 2. Word problem on linear equations: Problem type 2
 3. Word problem on mixed number proportions
 4. Word problem with linear inequalities
- Graphs and Functions
 - Graphing
 1. Graphing a line given the x and y intercepts
 2. Graphing a line given the equation in slope-intercept form
 3. Graphing a line given the equation in standard form
 4. Graphing the line through a given point with a given slope
 5. Determining the slope of a line given its graph
 6. Graphing a vertical or horizontal line
 - Writing
 1. Y-intercept of a line
 2. X and Y intercepts of a line given the equation in standard form
 3. Finding the slope of a line given its equation
 4. Writing the equation of a line given the slope and the y-intercept
 5. Writing the equation of a line given the slope and a point
 6. Writing the equation of the line through two given points
 7. Writing the equations of vertical and horizontal lines through a given point
 8. Writing the equation of the line through a given point and parallel to a given line
 9. Writing the equation of the line through a given point and perpendicular to a given line
 - Inequalities
 1. Graphing a linear inequality in the plane: Problem type 1
 2. Graphing a linear inequality in the plane: Problem type 2
 - Absolute Values
 1. Graphing a linear equation with absolute value in the plane
 - Sets, Relations, and Functions
 - * Sets

1. Set builder notation
 2. Union and intersection of sets
 3. Intervals
 - * Relations
 1. Domain and range of a relation
 - * Functions
 1. Function tables
 2. Graphing integer functions
 3. Domain and range of an integer function
 4. Domain and range of a real function
 5. Relations and functions: The vertical line test
- Exponents and Polynomials
 - Exponents
 - * Properties of Exponents
 1. Product rule of exponents
 2. Quotients of exponent expressions
 - Factoring
 - * Quadratic Polynomials
 1. Roots of a quadratic equation with leading coefficient 1
 - Rational Expressions and Functions
 - Simplifying expressions
 1. Multiplying rational expressions, type 1
 - Solving equations
 1. Restriction on variable in a denominator
 - Direct and Inverse Variations
 1. Word problem on inverse proportions
 2. Circumference ratios
 - Radicals and Quadratic Equations
 - * Radicals and Rational Exponents
 - Solving equations
 1. Pythagorean theorem