Discrete Math

3. Algebraic Expressions and Solving Single Variable Equations

3.1 Simplifying Expressions

- 3.1.1 Identify Terms
- 3.1.2 Identifying and Combining Like Terms
- 3.1.3 Evaluate Algebraic Expressions
- 3.1.4 Simplifying Expressions
- 3.1.5 Build Expressions from Word Phrases

3.2 Solving Linear Equations in one variable

- 3.2.1 Identify Linear Equations
- 3.2.2 Solve One-Step Equations
- 3.2.3 Solving Equations of the Type ax + b =c
- 3.2.4 Use Distributive Property to Solve Equations
- 3.2.5 Solve General Linear Equations

4. Linear Equations in two Variables

4.1 Linear Equations in Two Variables

- 4.1.1 Solution of a Linear Equation
- 4.1.2 Graphing a Linear Equation using Points
- 4.1.3 Graphing a Linear Equation using Intercepts

4.2 Equation of a Line

- 4.2.1 Slope of a Line Through Two Given Points
- 4.2.2 Slope-Intercept Form Equation of a Line and Graphing
- 4.2.3 Equation of a Line given Slope and any Point on the Line
- 4.2.4 Equation of a Line in Two-Point Form
- 4.2.5 Writing Equations in Slope Intercept or Standard Form
- 4.2.6 Equation of a Line in Function Form

4.3 Comparing Two Linear Functions

- 4.3.1 Solve by Graphing (Finding the common Point of Two Intersecting Linear Functions)
- 4.3.2 Intersecting, Parallel, and Coincident Lines

4.4 Application of Linear Functions to Business and Economics

- 4.4.1 Linear Cost Functions, C(x)
- 4.4.2 Linear Revenue Functions
- 4.4.3 Linear Profit Function
- 4.4.4 Break-Even Analysis
- 4.4.5 Linear Demand Function
- 4.4.6 Linear Supply Function
- 4.4.7 Equilibrium Point, Shortage and Excess