Unit 5- Moving Straight Ahead
Investigations 1 through 4
UNIT STUDY GUIDE

Things we need to know:

- Define the following vocabulary words
  - Linear Relationship
  - Dependent Variable
  - Independent Variable

- Create a table based on a real world scenario
  - From that table create a graph and equation
  - From the information identify a certain data point

- Create a graph based on a real world scenario
  - Understand what the line of the graph means
  - If the line was steeper, how would that affect the rate of change and/or equation?

- What the y-intercept is
  - Be able to identify/locate it on/in the following:
    - Table
    - Graph
    - Equation

- What the slope is
  - Be able to identify/locate it on/in the following:
    - Table
    - Graph
    - Equation

- What the solution of an equation is and if a certain ordered pair makes that equation true or lies on the line of a graph
• How to solve an equation AND check the solution
  o Using the Distributive Property
  o Using Properties of Equality

• Definition of Equivalent Expression
  o Expressions that represent the same quantity

• Definition of Properties of Equality
  o Addition Property of Equality
  o Subtraction Property of Equality
  o Multiplication Property of Equality
  o Division Property of Equality

• What the Point of Intersection represents
  o The point where two lines intersect. If the lines are represented on a coordinate grid, the coordinates for the point of intersection can be read from the graph.
    ▪ On a graph
    ▪ For two equations
    ▪ In a table

• Definition of Inequality Statements

• Find the value of an equation, given the indicated variable

• What type of line has an undefined slope

• What type of line has a slope of zero

• When two lines are parallel, what does that tell us about the slopes?

• When two lines are perpendicular, what does that tell us about the slopes?