

Enriched Algebra A	September - Linear Models	October - Linear Graphing	November - Linear Inequalities
Essential Questions	How do you use scatter plots to find correlations between variables? How do you write the equation of a line? How do you use an equation to make predictions about data?	How do we create graphs given the equation of a line? How can we find the linear equation for a specific graph? How can we use graphs to model real world scenarios? What is a function, and how can it be evaluated?	What is the difference between equations and inequalities? How can real-life situations be modeled through the use of inequalities? How does absolute value relate to linear equations? How do you make and use a stem & leaf plot and a box & whisker plot to order data and find measures of central tendency?
Content	<ol style="list-style-type: none"> Scatter Plots showing: <ul style="list-style-type: none"> no correlation positive correlation negative correlation Data Collection Use scatter plots to make predictions Draw the line of best fit Calculate the slope of a line from a table, from a graph and from the formula Write the equation of a line: <ul style="list-style-type: none"> given point & slope given 2 points Interpolation & Extrapolation within data TI – 84 Training/Navigator Training 	<ol style="list-style-type: none"> Graph an equation with one & two variables (slope – intercept graphs) Write the equation of the line for a given graph Determine the intercepts for an equation Sketch graphs using intercepts Determine possible solutions for an equation Parallel & Perpendicular Lines Functions & Relations Evaluating functions Identify the Domain & Range of a function TI – 84 Usage 	<ol style="list-style-type: none"> Solving & graphing simple and compound inequalities in one variable Problem solving using inequalities and compound inequalities Graphing linear inequalities in two variables Solving absolute value equations and inequalities Number line graphs for absolute value inequalities Graphs of absolute value equations Stem & Leaf Plots Box & Whisker Plots Measures of Central Tendency
Skills	<ol style="list-style-type: none"> Create graphs of scatter plots (by hand at first, then mainly on the TI-84) & make general predictions about trends Determine the correlation between the variables Draw the line of best fit Find the slope of the best fitting line, using 2 data points Write the equation of the best fitting line (by hand & using calculator) Make predictions using interpolation & extrapolation with the equation Collect data, create graphic models of data, compute & graph trend line, use line to make predictions for data 	<ol style="list-style-type: none"> Graph equations in one variable Write the equation for the vertical or horizontal graph Sketch a 2 variable equation using slope-intercept form (check graphs using the TI-84) Write the equation of the line given the graph Find the intercepts of an equation Create a graph using only the intercepts Determine possible solutions for an equation or modeled situation Use intercepts, and intercept graphs, to model real world scenarios Explore relationships between parallel & perpendicular lines using graphic & algebraic means Identify relations that are functions, graphically and using a set of ordered pairs (vertical line test) Evaluate functions for a given variable Identify the restrictions of a function or relation (domain & range) Apply domain & range concepts to determining the appropriate window for equations & data 	<ol style="list-style-type: none"> Solve and graph inequalities in one variable Solve and graph compound inequalities Use and write inequalities to model real life situations Create graphs for 2 variable inequalities Solve & graph absolute value equations Solve & graph absolute value inequalities Organize data using a stem & leaf plot Determine the mean, median & mode of a set of numbers Arrange data using a box & whisker plot
CH Standards/Benchmarks	3.11 (3,4,6,7); 3.14 (5,6,10); 3.17 (2-5); 3.15 (1,6); 3.12 (7,13,15); 3.13 (13-20)	3.11 (3,5); 3.14 (1,2); 3.15 (4); 3.17 (2,3); 3.18 (1,2,4,7); 3.19 (1,2)	3.14 (8,9); 3.11 (3,5); 3.17 (1,2,3); 3.18 (1,2,4,6,7); 3.19;(1,2,3)
Assessments	<ol style="list-style-type: none"> Chapter Test & Quizzes TI-84/Navigator Activities Homework & Practice Worksheets 	<ol style="list-style-type: none"> Chapter Test & Quizzes TI-84/Navigator Activities Barbie Bungee Lab Homework & Practice Worksheets 	<ol style="list-style-type: none"> Chapter test & Quizzes TI-84/Navigator Activities Homework & Practice Worksheets