## CARROLL HIGH SCHOOL LESSON PLANS

## Teacher: Mrs. M. Williams

Subject: Algebra	Monday	Tuesday	Wednesday	Thursday	Friday
ACCRS:	<ul> <li>F-IF.4 For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship.</li> <li>F-IF.6: Calculate and interpret the average rate of change of a function (presented Symbolically or as a table) Over a specified interval.</li> <li>Estimate the rate of change from a graph</li> <li>A-CED.2 Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.</li> </ul>	F-IF.6: Calculate and interpret the average rate of change of a function (presented Symbolically or as a table) Over a specified interval. Estimate the rate of change from a graph	CCRS: 13. [A-CED2] Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.	F-IF.6: Calculate and interpret the average rate of change of a function (presented Symbolically or as a table) Over a specified interval. Estimate the rate of change from a graph CCRS: 13. [A-CED2] Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales. F-IF.4 For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship.	<ul> <li>F-IF.4 For a function that models a relationship between two quantities, interpret key features of graphs and tables in terms of the quantities, and sketch graphs showing key features given a verbal description of the relationship.</li> <li>F-IF.6: Calculate and interpret the average rate of change of a function (presented Symbolically or as a table) Over a specified interval.</li> <li>Estimate the rate of change from a graph</li> <li>A-CED.2 Create equations in two or more variables to represent relationships between quantities; graph equations on coordinate axes with labels and scales.</li> </ul>
Before:	Warm up calculate average rate of change	Warm up from homework problems and one step spiral review problem	Spiral review two step equations and graphing a line given the domain ( make a table)	Review any questions from the night before homework	Answer any questions from the review for the test
During:	I will divide students into groups of two or three. Complete the first row in the table with the entire class, demonstrating the process to determine Mrs. Smith's weight for each week. Have students predict what will happen to her weight as the weeks increase if she is able to lose 0.5 kg per week.	The students will be able to graph a line given the slope and the y intercept. They will be able to put an equation in slope intercept form.	The students will be able to graph a line given the slope and the y intercept. They will be able to put an equation in slope intercept form.	Students will be put into groups of 4 and they will walk around the room and complete problems at stations that will be set up around the classroom.	Test

After:	Students will complete the classwork with their group	Students will complete the sheet with in class with me and then with a partner.	Students will complete the sheet with in class with me and then with a partner.	Students will complete the classwork with me and with their group members	Test
Desired Outcome:	<ul> <li>Students will</li> <li>Translate a real-world scenario into a table.</li> <li>Graph data points.</li> <li>Calculate the slope of a line.</li> <li>Define slope of a line as constant rate of change.</li> </ul>	Students will be able to find the slope from a graph using " <i>rise over</i> <i>run</i> " and students will be able to graph a line given the slope and the y intercept	Students will be able to graph a line given the slope and the y intercept. They will be able to put an equation in slope intercept form.	Students will be able to solve the slope when given a graph, table or two points. They will be able to solve for r and they will be able to solve an equation when in slope intercept form.	Students will be able to solve the slope when given a graph, table or two points. They will be able to solve for r and they will be able to solve an equation when in slope intercept form successfully for the test
Formative/Summative	<ul><li>Students engage in independent practice.</li><li>Students apply knowledge to a new situation.</li><li>Students summarize a process or procedure</li></ul>	Warm up and I will walk around and assess their independent work	Warm up/ class work	Station review	test
Homework:	Complete work on average rate of change in google classroom 1-9; 14&15	Complete work on slope and slope intercept form	Complete work on slope and slope intercept form	Study guide given	none
Higher Order Questions:	Is there information provided for mid-week values? Can Mrs. Smith's weight fluctuate during the week as long as her cumulative weight loss for the week is 0.5 kg? How do these answers affect the domain of the data?	What are all of the characteristics of the graph that you can find?	Can an equation be written in standard form once it is in slope intercept form?	What is the difference between positive and negative slopes and what does those slopes mean in the context of a particular scenario?	Explain how to calculate the slope, or average rate of change, from the table, from the graph, and from tow coordinate points.