

Linear Equation Real World Project

For this project, you will be working individually to demonstrate the knowledge you have learned throughout this unit. Your task is to come up with a real-world situation in which you could use a linear function to model the relationship between two quantities. You will then have to write a linear equation, identify what each part of the linear equation stands for, explain how you know that your equation is linear, create a table of at least five values, and draw the corresponding graph, explain what the slope means in relationship to the situation. Finally, analyze your graph by pointing out the initial value and what it means, stating whether your function is increasing or decreasing, and choosing a point in the future to make a prediction. You have a choice to create this project using PowerPoint or a poster. Have fun, impress me, and don't forget to go Above & Beyond!

Linear Equation Project Rubric

Topic	Score
Real world situation clearly stated with two quantities. Situation is relevant and original. A linear equation can be used to represent this situation.	/20
Linear equation correctly formed from your situation. Explained how you knew the equation is linear. Variables are clearly identified. What does y, m, x, and b mean in your situation?	/30
Table created with at least 5 values (including the initial value of $x = 0$) from your linear function. Your variables must be clearly labeled.	/10
Graph created with at least 5 values (including the initial value) from your linear function. Your graph must have a title and the axes must be labeled.	/10
Identify the rate of change (slope) and explain what it means for the situation.	/5
Analyze your graph by pointing out the initial value ($x = 0$) and stating whether your graph is increasing or decreasing. (Explain what that means for your situation.)	/10
Using your linear equation, make a prediction about a future input value. (Explain what that means for your situation.)	/10
Exhibit a creative, wow factor. Go above and beyond!	/ 5
	Total: /100

