

# Story Problems with Linear Equations

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**SUBJECT**

Math

**TEACHER****GRADE**

[00]

**DATE**

[Date]

**OVERVIEW**

Create linear equation for story problems

**PREREQUISITES**

- Introduction to linear equations

**RESOURCES**

- Whiteboard or Chalkboard

**NOTES**

This can work to a segway to inequalities in a future lesson.

**PHASES****TEACHER GUIDE****STUDENT GUIDE**

OBJECTIVES	Learn the components of a linear equation	
OPENING	Students are divided into groups of sufficient size to facilitate one group situated around the room at a whiteboard or chalkboard	
STORY INVOLVING LINEAR EQUATION	Needing to estimate how many years until public transportation has been saturated with users	
ACTIVITY	Students research what is needed: Population estimates, population projections, # of transportation users, etc. $\text{User Saturation} = (\text{population increase} * \text{years} + \text{current population}) * \text{proportion of population who use transportation}$	Those at the board keep information written down. Then solve the equation. At the end of the hour students at the board have solved a story with information from the class
SUMMARY		Ability to apply story problems to linear equations