

# Lesson 6.4: Applying Linear Equations

## Targets

1. I can solve linear equation word problems.
2. I can solve linear equations with segmented addition.

## Basic Linear Equation Word Problem

First attempt this problem on your own. Then watch the video and copy his notes.

- *Marcia has just opened her new computer store. She makes \$27 on every computer she sells and her monthly expenses are \$10,000.*
- *What is the minimum number of computers she needs to sell in a month to make a profit.*

Your attempt:

Video Notes:

Write an equation that represents this situation:	Write an equation that represents this situation:
Now find the minimum number of computers:	Now find the minimum number of computers:

## Linear Equation Word Problem

First attempt this problem on your own. Then watch the video and copy his notes.

- *MacDonald had a farm with a certain number of orange trees. He had to cut down 5 trees to control insects. Each of the remaining trees produced 210 oranges producing a total harvest of 41,790 oranges.*
- *How many trees did MacDonald's farm have initially?*

Your attempt:

Video Notes:

Write an equation that represents this situation:	Write an equation that represents this situation:
Now find the number of trees:	Now find the number of trees:

### **Khan Activity: Linear Equation Word Problems**

Complete this activity on Khan.

#### **Linear Equation Using Segments**

First attempt this problem on your own. Then watch the video and copy his notes.

- $JK = 7x + 9$
- $JL = 114$
- $KL = 9x + 9$



Your attempt:

Video Notes:

Find KL

Find KL

### **Khan Activity: Equation Practice with Segment Addition**

Complete this activity on Khan.

#### **Exit Ticket**

1. Have all your notes filled out above.
2. Complete the following Khan Academy Activities:
  - a. Linear Equation Word Problems
  - b. Equation Practice with Segment Addition