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Primary Type: Tutorial

**Direct Link:** <https://www.khanacademy.org/math/cc-seventh-grade-math/cc-7th-variables-expressions/cc-7th-linear-eq-word-probs/v/linear-equation-word-problem-example>

# Linear equation word problem

Learn how to solve a word problem by writing an equation to model the situation. In this video, we use the linear equation  $210(t-5) = 41,790$ .

## General Information

**Subject(s):** Mathematics

**Grade Level(s):** 8

**Intended Audience:** [Educators](#), [Students](#)

**Instructional Time:** 6 Minute(s)

**Suggested Technology:** Computers for Students, Internet Connection, Speakers/Headphones

**Keywords:** linear equation

**Instructional Component Type(s):** [Tutorial](#)

**Instructional Design Framework(s):** [Demonstration](#)

**Resource Collection:** Secondary Math specific existing tutorials

## Source and Access Information

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**Name of Author/Source:** Khan Academy

**District/Organization of Contributor(s):** Leon

**Access Privileges:** Public

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## Aligned Standards

Name	Description
<a href="#">MAFS.8.EE.3.7:</a>	<p>Solve linear equations in one variable.</p> <p>a. Give examples of linear equations in one variable with one solution, infinitely many solutions, or no solutions. Show which of these possibilities is the case by successively transforming the given equation into simpler forms, until an equivalent equation of the form <math>x = a</math>, <math>a = a</math>, or <math>a = b</math> results (where <math>a</math> and <math>b</math> are different numbers).</p> <p>b. Solve linear equations with rational number coefficients, including equations whose solutions require expanding expressions using the distributive property and collecting like terms.</p> <div style="border: 1px solid black; padding: 5px; margin-top: 10px;"> <p><b>Clarifications:</b> <b>Fluency Expectations or Examples of Culminating Standards</b></p> <p>Students have been working informally with one-variable linear equations since as early as kindergarten. This</p> </div>

important line of development culminates in grade 8 with the solution of general one-variable linear equations, including cases with infinitely many solutions or no solutions as well as cases requiring algebraic manipulation using properties of operations. Coefficients and constants in these equations may be any rational numbers.

**Examples of Opportunities for In-Depth Focus**

This is a culminating standard for solving one-variable linear equations.