

Domain	Functions and Modeling	
Cluster	Explore expressions, functions, and models to describe numbers or relationships.	
Standard(s)	M.ASHS.13	Create equations and inequalities in one variable and use them to solve problems. Instructional Note: Include equations arising from linear and quadratic functions, simple rational and exponential functions.

Content Examples

- » *Writing equations from word problems*
- » *Two-step equation word problem: computers*
- » *Two-step inequality word problem: R&B*
- » *Proportion word problem: cookies*
- » *Rational equation word problem*
- » *Quadratic inequality word problem*
- » *Exponential equation word problem*

Relevant Content

Vocabulary

Rational equation: An equation that involves one or more rational expressions

- » Translating word problems into equations (step by step):
http://www.algebralab.org/lessons/lesson.aspx?file=Algebra_OneVariableWritingEquations.xml
- » Exponential word problems:
<https://www.purplemath.com/modules/expoprob2.htm>
- » Word problems leading to rational equations:
<https://www.engageny.org/resource/algebra-ii-module-1-topic-c-lesson-27>

Assessment Links or Tasks

- » ACT practice problems (mixed with some word problem examples):
<https://actacademy.act.org/assessment/act-aspire-practice-problems/9498017>