

| Domain      | Functions and Modeling                                                           |                                                                                                                                                                                                 |
|-------------|----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Cluster     | Explore expressions, functions, and models to describe numbers or relationships. |                                                                                                                                                                                                 |
| Standard(s) | M.ASHS.19                                                                        | Solve simple rational and radical equations in one variable, and give examples showing how extraneous solutions may arise. Instructional Note: Extend to simple rational and radical equations. |

## Content Examples

- » [Rational equations intro](#)
- » [Extraneous solutions](#)
- » [Equations with rational expressions](#)
- » [Equations with rational expressions \(more challenging\)](#)
- » [Intro to solving square root equations and extraneous solutions](#)

## Relevant Content

### Vocabulary

- » Rational equation: An equation that involves one or more rational expressions
- » Radical equation: An equation that involves one or more radical expressions
- » Extraneous solution: A solution that does not satisfy the original equation

### [Solving Rational Equations](#)

### [Solve Simple Radical Equations](#)

Evaluating Statements about Radicals:

<https://www.map.mathshell.org/lessons.php?unit=9115&collection=8>

## Assessment Links or Tasks

- » Solving Rational Equations Project:  
<https://kalamitykat.com/2010/02/21/solving-rational-equations-project/>
- » Evaluating Statements about Radicals:  
<https://www.map.mathshell.org/download.php?fileid=1714>
- » An Extraneous Solution:  
<https://tasks.illustrativemathematics.org/content-standards/HSA/REI/A/2/tasks/1927>
- » Extraneous Solutions:  
<https://education.ti.com/en/timathnspired/us/detail?id=4251F38ABB3145F9BE8082AA4EE0D549&t=42257C207BF44A2088A18F8D03F71028>

