

Radicals Lesson 4

Multiplying and Simplifying

Radical Expressions

Teacher Guide

Symbols and Concepts

- Radical expression
- Square root
- Index-of-radical indicator
- Index
- Radical symbol ($\sqrt{}$)
- Radicand
- Termination indicator

Prerequisites

The following Nemeth symbols and concepts will be addressed in this lesson, but they will not be thoroughly explained, so the student should be already skilled in these areas prior to starting this lesson:

- Operation signs
- Parentheses
- Exponents
- Equals sign

Objectives

The student will be able to:

- Read and write problems where a radical expression is multiplied by another radical expression
- Read and write problems where square roots are multiplied and/or simplified
- Read and write problems where indexed radicals are multiplied and/or simplified

Teaching Tips

- Before opening any BRF files in Duxbury,
 - Go into the Global menu.
 - Select "**Formatted Braille Importer.**"
 - Select the box for "**Read formatted braille without interpretation**" at the top of the window. This will ensure that nothing is changed when opening the BRF files.
- In addition to the embedded activities within the focused lesson, there is one follow-up activity.
- When reading long problems to students, be sure to pause frequently to allow the student to finish brailleing each section of a problem before moving on to the next section. At a minimum, pause after each end root.
- The "L4-Radicals-Problems-Only.brf" braille document may be used to supplement the lesson since it contains all of the examples and equations in braille. For example, the theorem used when multiplying and simplifying radical expressions is included in the problems only braille document.
- The answers for the follow-up activity are available in SimBraille and braille.
- If needed, remind the student to check their work during writing activities.
- You may want to have the student practice reading radical expressions involving multiplication and simplifying as well. This can be done by using the answer key.