

How to Read and Write a Radical Expression

Nemeth symbols and concepts addressed:

- Radical expression
- Radical symbol ($\sqrt{}$)
- Radicand
- Index
- Square root
- Principal square root
- Negative square root
- Termination indicator
- Superscripts or exponents
- Superscript indicator
- Baseline indicator
- Subscripts
- Distance formula

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:

- Fractions
- Decimals
- Operation signs

Objectives:

The student will be able to:

- 1) Write radical expressions with no indicated index (square roots) using the correct Nemeth symbols
- 2) Define the terms: radical expression, radical symbol, index, radicand, square root, principal square root, and negative square root
- 3) Read radical expressions with no indicated index (square roots) using the correct Nemeth symbols

Teaching tips:

- Before opening any BRF files in Duxbury, go into the Global menu. Select "Formatted Braille Importer" and then check 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 answers for the follow-up activity are available in SimBraille and braille. Please note that these are not formatted in cell 1 with run-overs in cell 3 since the word "Answer" is included.
- If needed, remind the student to check his/her work during writing activities.
- You may want to have the student practice reading radical expressions with no indicated index (square roots) as well. This can be done by using the answer key.