

# Simple Fractions with Signs of Operation and Comparison

## *Nemeth symbols and concepts addressed:*

- Opening simple fraction indicator
- Horizontal fraction line
- Closing simple fraction indicator
- Denominator
- Numerator
- Plus sign (+)
- Minus sign (–)
- Multiplication cross (×)
- Multiplication dot (•)
- Division (divided by) sign (÷)
- Equals sign (=)
- Less than sign (<)
- Greater than sign (>)
- Variable (only in version with variables)
- Superscript or exponent indicator (only in version with variables)
- Baseline indicator (only in version with variables)

## *Objectives:*

The student will be able to:

- 1) Read and write problems containing simple fractions and signs of operation
- 2) Read and write problems containing simple fractions and signs of comparison
- 3) Read and write problems containing simple fractions involving both signs of operation and signs of comparison
- 4) Read and write problems containing simple fractions with superscripts or exponents (only in version with variables)
- 5) Read and write problems containing simple fractions with superscripts or exponents that require the use of the baseline indicator (only in version with variables)

### *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.
- This focused lesson has two versions. One version does not include variables and one does. Select the version that is appropriate for your student.
- In addition to the embedded activities within the focused lesson, there is one follow-up activity for each of the two versions.
- 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 the fractions with signs of operation and comparison as well. This can be done by using the answer keys.

### *Materials Commercially Available:*

Materials that could be used from the American Printing House for the Blind ([www.aph.org](http://www.aph.org)) include

- Fractional Parts of Wholes Set (1-03290-00)
- \*Unit 7: Fractions, Mixed Numbers, and Decimals (Student consumables for both kits are in braille):
  - Large Print Kit: (7-03564-00: Teacher's Guide in Large Print)
  - Braille Kit: (5-03564-00: Teacher's Guide in Braille)
- \*Number Line Device (1-03480-01)
- Cranmer Abacus (1-03150-00)
- Large Abacus (1-03170-00)

\* *WARNING: CHOKING HAZARD -- Small Parts. Not intended for children ages 5 and under without adult supervision.*

### *Other Optional Materials:*

- Fraction cubes
- Fraction number lines
- Fraction tiles
- Fraction towers