

Introduction to Lesson 1

Lesson 1 introduces fractions, mixed numbers, and inequalities. The Project INSPIRE team recommends that activities be completed in the order provided.

Activity 1: Symbol List

Directions: Review the Symbol List with the student before beginning the activities. If the student is not familiar with any symbol spend time introducing it and how it is used in math materials.

⠠ plus

⠠ minus sign

⠠⠠ equals sign (is equal to)

⠠⠠⠠ not equal to

⠠⠠ greater than

⠠⠠⠠ greater than or equal to

⠠⠠ less than

⠠⠠⠠ less than or equal to

⠠ ⠠ opening and closing simple fraction indicators

⠠ horizontal fraction line

⠠⠠ ⠠⠠ opening and closing mixed number fraction indicators

⠠ general omission symbol

⠠⠠⠠⠠ long dash

Activity 2: Maze Level 1 Answers

Directions: Have the student read each fraction as they advance through the maze.

Answer Key:

Start

$\frac{2}{6}$	two-sixths	⠠⠨⠠⠶⠠⠶
$\frac{6}{8}$	six-eighths	⠠⠨⠠⠶⠠⠸
$\frac{8}{10}$	eight-tenths	⠠⠨⠠⠶⠠⠠⠶
$\frac{10}{70}$	ten-seventieths	⠠⠨⠠⠶⠠⠠⠶⠠⠠⠶
$\frac{4}{100}$	four-hundredths	⠠⠨⠠⠶⠠⠠⠶⠠⠠⠶
$\frac{25}{6}$	twenty-five-sixths	⠠⠨⠠⠶⠠⠠⠶
$\frac{36}{7}$	thirty-six-sevenths	⠠⠨⠠⠶⠠⠠⠶
$\frac{84}{42}$	eighty-four over forty-two	⠠⠨⠠⠶⠠⠠⠶⠠⠠⠶
$\frac{92}{36}$	ninety-two over thirty-six	⠠⠨⠠⠶⠠⠠⠶⠠⠠⠶

Finish

Activity 3: Maze Level 2 Answers

Directions: Have the student simplify each fraction to lowest terms and convert all improper fractions to the equivalent whole number or mixed number. The student must write their answers in correct Nemeth Code on a separate piece of braille paper.

Start

$\frac{1}{3}$ one-third ⠠⠠⠠⠠⠠⠠

$\frac{3}{4}$ three-fourths ⠠⠠⠠⠠⠠⠠

$\frac{4}{5}$ four-fifths ⠠⠠⠠⠠⠠⠠

$\frac{1}{7}$ one-seventh ⠠⠠⠠⠠⠠⠠

$\frac{1}{25}$ one-twenty-fifth ⠠⠠⠠⠠⠠⠠⠠⠠

$4\frac{1}{6}$ four and one-sixth ⠠⠠⠠⠠⠠⠠⠠⠠⠠⠠

$5\frac{1}{7}$ five and one-seventh ⠠⠠⠠⠠⠠⠠⠠⠠⠠⠠

2 two ⠠⠠

$2\frac{5}{9}$ two and five-ninths ⠠⠠⠠⠠⠠⠠⠠⠠⠠

Finish

Activity 4: What is Wrong?

Directions: Have the student read the expressions in each of the four quadrants. What is wrong with each of the first three expressions? It is a common mistake. The last choice is always correct. There is also a challenge puzzle that has two mistakes.

One-half

$\frac{1}{2}$	$\frac{5}{3}$
$\frac{2}{10}$	$4\frac{2}{5}$

Challenge (Find two mistakes.)

Three and one-fourth is greater than or equal to two and three-fourths.

$3\frac{1}{4} \geq 2\frac{3}{4}$

Activity 5: Which One Doesn't Belong?

Directions: Have the student read the expression in each of the four quadrants and share their reasoning as to "Which One Doesn't Belong and Why?" The great thing about this activity is that there are no wrong answers. As long as the student's reasoning is accurate, they are correct.

Note: Be sure to watch the video Sara Larkin created that explains how to facilitate the "Which One Doesn't Belong?" activity.

1.

$\frac{1}{2}$	$\frac{5}{3}$
$\frac{2}{10}$	$4\frac{2}{5}$

2.

$x \geq 5$	$2 \leq 7$
$2 > x$	$x > 1$

Activity 5: What is the Question?

Directions: Now is the student's chance to be creative! The student will be given the answer and needs to come up with a question which gives them that answer. There is an example of a question to get them started, but they must come up with their own. Challenge the student to use as many different symbols as they can!

Answer: $5\frac{1}{2}$

Question example: $2\frac{1}{4} + 3\frac{3}{4} - \frac{1}{2} = ?$

Your question that gives the same answer: