

# Pre-Algebra Handout 1: How to Solve a Fraction Problem

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CALCULATORS: Casio: *fx-300ES* • Casio: *fx-300MS*

## Rationale

The Casio *fx-300ES* has a fraction key that produces a template showcasing, in natural form, a numerator and denominator entry as well as a mixed number template that showcases a whole number, numerator and denominator. You can select whether you want the fraction to be displayed as a mixed number or improper fraction.

**Problem:** Solve  $2\frac{3}{8} + 1\frac{1}{2}$ .

## *fx-300ES*

To solve the problem  $2\frac{3}{8} + 1\frac{1}{2}$ :

- Determine the format for the answer by pressing **SHIFT SETUP Arrow Down**. Select **1** for Mixed Number ( $a^b/c$ ) or Select **2** for Improper Fraction ( $d/c$ ). In this case, we will display the answer as a mixed number by pressing **1**.
- To input the mixed number  $2\frac{3}{8}$ , press **SHIFT** followed by the **fraction** key and the template for the mixed number appears on the screen.
- Type in the whole number (**2**).
- Press the **Right Arrow** to notice the cursor flashing in the numerator.
- Type in the numerator (**3**).
- Press the **Down Arrow** to notice the cursor flashing in the denominator.
- Type in the denominator (**8**).
- Press the **Right Arrow** and input the operation (+).
- To input  $1\frac{1}{2}$ , press the **fraction** key to display the fraction template.
- The cursor is already flashing in the numerator.
- Input the numerator (**11**).
- Press the **Down Arrow** to see the cursor flashing in the denominator.
- Input the denominator (**2**).
- At this point, you can either press the **Right Arrow** or press the equal key (=) to obtain the solution.
- The answer will be displayed as  $7\frac{7}{8}$  in mixed number form. The format was decided in the Step 1.
- You can toggle between the mixed number and improper fraction from by pressing Shift and the **S↔D** key.
- You can display the decimal equivalent of your answer by only pressing the **S↔D** key.

## *fx-300MS*

To solve a problem such as  $2\frac{3}{8} + 11/2$ :

- Input the mixed number by pressing the whole number (**2**).
- Press the fraction key (**a<sup>b</sup>/c**).
- Input the numerator (**3**).
- Press the fraction key (**a<sup>b</sup>/c**).
- Input the denominator (**8**).
- Input the operation (+).
- Input the numerator (**11**).
- Press the fraction key (**a<sup>b</sup>/c**).
- Input **2** for the denominator.
- Press = to display the answer.
- To convert the mixed number to an improper fraction, press the **SHIFT** followed by **d/c** to display  $63/8$ .
- To convert the answer to its decimal equivalent, press **a<sup>b</sup>/c** to display the decimal.