Mathematics 9

Section 3.2 - Adding Rational Numbers

Thus far you have experience adding rational numbers such as:

$-8+(-4) = -12$ $\quad 2+(-9) = -7$ $\quad -3.2+4.6 = 1.4$ $\quad \frac{3}{11}+\frac{5}{11} = \frac{8}{11}$

Now we are going to look at adding fractions when NEGATIVES are involved.

Suppose we have: $\frac{3}{5}+\left(-\frac{7}{10}\right)$

Step 1 - DEAL WITH THE + AND - TOUCHING

$$\frac{3}{5}-\frac{7}{10}$$

Step 2 - FIND A COMMON DENOMINATOR (BOTTOM)

$$\frac{6}{10}-\frac{7}{10}$$

Step 3 - COMBINE NUMERATOR (TOP)

$$-\frac{1}{10}$$

Suppose we had:

$$-2\frac{1}{3} + 1\frac{3}{4}$$

Step 1 - NOT NEEDED IN THIS CASE

Step 2 - 1ST IMPROPER FRACTIONS

2ND COMMON DENOMINATOR

$$\frac{-7}{3} + \frac{7}{4} \rightarrow -\frac{28}{12} + \frac{21}{12}$$

Step 3 - PERFORM OPERATION

$$\frac{-7}{12}$$

p.111 5.b, 7bd, 11bdhj, 13, 17bc, 18

Homework: pg.