# ORDER OF OPERATIONS INVOLVING FRACTIONS AND MIXED NUMBERS

*LESSON NOTES*

**BIG IDEAS:**

- The **BEDMAS** order of ensure consistency when evaluating mathematical expressions.

**B**rackets — *the math inside the brackets*

**E**xponents

**D**ivision
**M**ultiplication — *in the order they appear from left to right*

**A**ddition
**S**ubtraction — *in the order they appear from left to right*

**EXAMPLE 1**

$$\frac{3}{4}\left(\frac{1}{2}-\frac{4}{5}\right)$$

$$=\frac{3}{4}\left(\frac{5}{10}-\frac{8}{10}\right)$$

$$=\frac{3}{4}\left(\frac{-3}{10}\right)$$

$$\frac{-9}{40}$$

**EXAMPLE 2**

$$\left(\frac{4}{3}-\frac{1}{5}\right)\left(\frac{3}{2}+\frac{5}{6}\right)$$

$$=\left(\frac{20}{15}-\frac{3}{15}\right)\left(\frac{9}{6}+\frac{5}{6}\right)$$

$$=\left(\frac{17}{15}\right)\left(\frac{14}{6}\right)$$

$$=\left(\frac{17}{15}\right)\left(\frac{7}{3}\right)$$

$$=\frac{119}{45}$$

$$=2\frac{29}{45}$$

**EXAMPLE 3**

$$\left(-\frac{5}{12}\right)\left(-\frac{1}{5}\right)+\left(\frac{3}{2}\right)\left(\frac{8}{3}\right)$$

$$=\frac{5}{60}+\frac{24}{6}$$

$$=\frac{5}{60}+\frac{240}{60}$$

$$=\frac{245}{60}$$

$$=\frac{49}{12}$$

$$=4\frac{1}{12}$$

**MORE EXAMPLES**

Things to remember...