Lesson 3.9 – Order of Operations with Fractions

Recall:

Last chapter we learned about the Order of Operations with Integers. We learned the acronym ___BEDMAS___ which helps us remember which operation to do first. Remember that fractions fall into the category of ___division___ .

Investigate:

Complete the investigate activity on page 153 of your textbook. You may choose to work with a partner, if you do, choose a partner you have not worked with this year. Use the space below to write down your solution. Be prepared to show your solution to the class.

Solution

$$\frac{9}{4} \div \left(\frac{15}{16} - \frac{3}{8} \right)$$

$$= \frac{9}{4} \div \left(\frac{15}{16} - \frac{6}{16} \right)$$

$$= \frac{9}{4} \div \frac{9}{16}$$

$$= \frac{9}{4} \times \frac{16}{9}$$

$$= \frac{16}{4}$$

$$= 4$$

<u>Examples:</u>

1. $\dfrac{1}{2} + \dfrac{1}{4} \times \dfrac{2}{3}$

$= \dfrac{1}{2} + \dfrac{3}{12}$

$= \dfrac{6}{12} + \dfrac{3}{12}$

$= \dfrac{9}{12}$

$= \dfrac{3}{4}$

2. $\dfrac{3}{5} \times \left(\dfrac{1}{8} + \dfrac{2}{4} \right)$

$= \dfrac{3}{5} \times \left(\dfrac{1}{8} + \dfrac{4}{8} \right)$

$= \dfrac{3}{5} \times \dfrac{5}{8}$

$= \dfrac{15}{40}$

$= \dfrac{3}{8}$

3. $2\dfrac{1}{2} - 3 \times \dfrac{1}{4}$

$= \dfrac{5}{2} - \dfrac{3}{1} \times \dfrac{1}{4}$

$= \dfrac{5}{2} - \dfrac{3}{4}$

$= \dfrac{10}{4} - \dfrac{3}{4}$

$= \dfrac{7}{4}$

$= 1\dfrac{3}{4}$

<u>Assignment:</u>

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