Name:

Math 8 Fractions Unit Part 2:

BIG IDEA: Computational fluency and flexibility extend to operations with fractions.

CURRICULAR COMPETENCIES:

Reasoning and Analyzing: Demonstrate and apply mental math strategies. (ie. #1-3)

Understanding and Solving: Develop, demonstrate and apply mathematical understanding through problem solving. (ie. #4)

Complete Self Assessment of Learning Goals: Based on your self assessment your task is to target your own learning and practice for our quiz on Monday, January 21st. There are many problems included in your review handouts. Don't feel like you need to complete all the problems. Use this opportunity to ask for clarification and for support to help you do your very best!

1. I can multiply fractions.

Example Question: $\frac{4}{5} \times \frac{-3}{4} = \frac{(4\times -3)}{5\times 4} = \frac{-12}{20} \begin{matrix}\div 4\\ =\\ \div 4\end{matrix} \frac{3}{5}$

2. I can divide fractions.

Example Question: $\frac{3}{5} \div \frac{1}{4} = \frac{3}{5} \times \frac{4}{1} = \frac{12}{5}$

3. I can solve fraction problems with order of operations

Example Question: $\frac{7}{10} + \left(\frac{3}{4} \div \frac{1}{2}\right)$

$\frac{7}{10} + \left(\frac{3}{4} \times \frac{2}{1}\right)$

$= \frac{7\times 4}{10\times 4} + \frac{6\times 10}{4\times 10}$

$= \frac{28}{40} + \frac{60}{40} = \frac{88\div 4}{40\div 4} = \frac{22\div 2}{10\div 2} = \frac{11}{5}$

4. I can apply mathematical concepts to problem solving with fractions.

Example Question: $2\frac{1}{3} \times 4 = 3\times 2 = 6 + 1 = \frac{7}{3} \times \frac{4}{1} = \frac{28}{3}$

Example Question: *Furry Pets* pet store has 20 animals, and $\frac{2}{5}$ of them are puppies. How many puppies do they have?

I know: 20 animals total

$\frac{2}{5}$ are puppies.

① $\frac{20}{1} \times \frac{2}{5} = \frac{40}{5} = 8$

$\frac{2}{5} = 0.4 \times 20 = 8$

$0.4 = 40\%$

Multiple Strategies: ① Could think of $\frac{2}{5}$ as a % and x 20

This means 40% of the animals are puppies!