

Unit 1 Day 5  
1-5 Multiplication & Division of Fraction

Evaluate:  $2\frac{1}{2} \cdot 3\frac{1}{3}$

$$= \frac{5}{2} \cdot \frac{10}{3}$$

$$= \frac{25}{3}$$

Remember: reduce before multiplying!

1)  $2\frac{2}{5} \cdot 3\frac{3}{4}$

$$\frac{3 \cancel{10}}{10} \cdot \frac{13}{4}$$

$$= 9$$

2)  $\left(\frac{1}{\cancel{8}}\right) \left(\frac{13}{\cancel{21}}\right) \left(\frac{16}{\cancel{183}}\right)$

$$= \frac{16}{1275}$$

Division: Invert (take the reciprocal) of the divisor and change operation to multiplication.

Reciprocal  $\frac{5}{3}$  is  $\frac{3}{5}$

ex.  $4\frac{2}{5} = \frac{22}{5}$  is  $\frac{5}{22}$

Evaluate 1)  $\frac{3}{4} \div \frac{2}{1}$

$$\frac{3}{4} \cdot \frac{1}{2}$$

$$= \frac{3}{8}$$

2)  $-\frac{12}{7} \div \frac{32}{21}$

$$-\frac{12}{7} \times \frac{21}{32} = -\frac{9}{8}$$

$$3) \frac{-6}{25} \div \frac{2}{21} \div \frac{-14}{25}$$

$$\frac{\cancel{3}^3}{\cancel{125}^{25}} \cdot \frac{\cancel{21}^3}{\cancel{21}^1} \cdot \frac{\cancel{25}^1}{\cancel{-14}^2}$$

$$= \frac{9}{2}$$

The word "of" translates to multiplication

$$\text{ex. } \frac{5}{6} \text{ of } 12 = \frac{5}{6} \cdot \frac{\cancel{12}^2}{\cancel{1}^1} = 10$$

Time in mixed units (1 hour 12 minutes)  
can be written as a fraction.  $1 \frac{12}{60} = 1 \frac{1}{5}$

\* 1 hour 12 minutes is NOT 1.12!!