

Warm - up  
Oct. 16th

Find the LCD

$\frac{3}{8}$  and  $\frac{9}{28}$

$8 = 2 \cdot 2 \cdot 2$

$28 = 2 \cdot 2 \cdot 7$

$LCD = 2 \cdot 2 \cdot 2 \cdot 7 = 56$



## Homework due:

p. 26 (20 - 28)

p. 29 (1 - 10)

W-UPS (10/15 - 10/16)

$$4 = 2 \cdot 2$$

$$10 = 2 \cdot 5$$

$$LCM = 2 \cdot 2 \cdot 5$$

(20)

Homework due next Tu:

~~p. 31 (11 - 17)~~

## Building Equivalent Fractions

P. 31

**Property – The Multiplicative Identity**

1 is the multiplicative identity. Multiplying an expression by one results in an equivalent expression.

Example:  $\frac{2}{2} \times \frac{1}{3} = \frac{2}{6}$

**Procedure – Building Equivalent Fractions**

1. Find the factor, which when multiplied to the original denominator, gives the LCD. (To find the factor you can divide the LCD by the original denominator.)
2. Multiply both the numerator and denominator of the original fraction by the factor found in step 1.

P.31

**Procedure – Building Equivalent Fractions**

1. Find the factor, which when multiplied to the original denominator, gives the LCD. (To find the factor you can divide the LCD by the original denominator.)
2. Multiply both the numerator and denominator of the original fraction by the factor found in step 1.

$$\frac{4}{4} \cdot \frac{4}{5} = \frac{16}{20}$$

Rewrite the factor of 1 so the product is an equivalent fraction with the new denominator.

$$\frac{7}{8} = \frac{\boxed{?}}{40} \quad \leftarrow \frac{35}{40}$$

Rewrite the factor of 1 so the product is an equivalent fraction with the new denominator.

$$\frac{3}{3} \cdot \frac{5}{18} = \frac{\quad}{54}$$

$$-1 \cdot \frac{5}{18} = \boxed{-\frac{5}{18}}$$

Rewrite the factor of 1 so the product is an equivalent fraction with the new denominator.

$$\frac{12}{12} \cdot \frac{8}{15} = \frac{104}{180} = \frac{96}{180}$$

15  $\overline{)180}$



Rewrite the factor of 1 so the product is an equivalent fraction with the new denominator.

$$\frac{\frac{31}{31} \cdot \frac{5}{26}}{\frac{31}{31}} = \frac{155}{806}$$
$$\begin{array}{r} 26 \overline{) 806} \\ \underline{- 78} \phantom{0} \\ 26 \phantom{0} \\ \underline{- 26} \\ 0 \end{array}$$

