## Fractions: Common Denominators

<u>Denominator</u>: The bottom number of a fraction. The bottom number shows the total number of equal parts. Example in  $\frac{3}{4}$  the 4 is the denominator. This fraction would look like:

To find the common denominator of  $\frac{1}{2}$ ,  $\frac{2}{3}$  multiply the two denominators, this will give a common denominator, for larger number, find the factors of the denominators which would help to find the lowest common denominator. For the above pair, the denominator would be 6. What is do to the bottom number to get 6, must be done to the top number also.

Therefore  $\frac{1}{2}becomes \frac{3}{6}$  because 2 was multiplied by 3 to get 6, 1 must also be multiplied by 3.

 $\frac{2}{3}$  becomes  $\frac{4}{6}$ . When common denominators are in place, addition or subtraction of factors can occur.

Find common denominators for the following fraction pairs and show what the fraction is, the first one is done for you

$$\frac{1}{2}, \frac{3}{4} = \frac{2}{4}, \frac{3}{4}or\frac{4}{8}, \frac{6}{8}or\frac{8}{16}, \frac{12}{16}or\frac{10}{20}, \frac{15}{20}$$

1. 
$$\frac{1}{8}, \frac{2}{4} = -, -$$
 or  $\frac{1}{8}, \frac{2}{4} = -, -$  or  $\frac{1}{8}, \frac{2}{4} = -, -$ 

2. 
$$\frac{2}{5}, \frac{1}{10} = -, - \text{ or } \frac{2}{5}, \frac{1}{10} = -, - \text{ or } \frac{2}{5}, \frac{1}{10} = -, -$$

3. 
$$\frac{2}{3}, \frac{1}{4} = -, -$$
 or  $\frac{2}{3}, \frac{1}{4} = -, -$  or  $\frac{2}{3}, \frac{1}{4} = -, -$ 

4. 
$$\frac{3}{7}, \frac{1}{14} = -, -$$
 or  $\frac{1}{2}, \frac{3}{4} = -, -$  or  $\frac{2}{9}, \frac{5}{6} = -, -$ 

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