## Subtracting Fractions with Different Denominators

When you are subtracting fractions with different denominators, you must convert at least one of the fractions so that both fractions have the same denominators.

Examples:

1. $\frac{7}{8}-\frac{2}{4}=$

First, find the lowest common denominator. Both 8 and 4 are factors of 8. For the fraction $\frac{2}{4}$, you multiply both the numerator and denominator by 2 , which equals $\frac{4}{8}$. The question can then be rewritten and solved as $\frac{7}{8}-\frac{4}{8}=\frac{3}{8}$.
2. $\frac{3}{6}-\frac{1}{3}=$

Both denominators are factors of 6 .

$$
\frac{1}{3} \times 2=\frac{2}{6} \quad \frac{3}{6}-\frac{2}{6}=\frac{1}{6}
$$

Try the following equations. Remember to simplify your answers.

1. $\frac{3}{3}-\frac{2}{6}=$
2. $\frac{7}{8}-\frac{2}{4}=$
3. $\frac{9}{12}-\frac{2}{6}=$
4. $\frac{18}{9}-\frac{2}{3}=$
5. $\frac{16}{20}-\frac{3}{5}=$
6. $\frac{9}{10}-\frac{4}{20}=$

7. $\frac{12}{14}-\frac{3}{7}=$ $\qquad$
8. $\frac{13}{16}-\frac{5}{8}=$ $\qquad$
9. $\frac{10}{12}-\frac{4}{24}=$
10. $\frac{7}{9}-\frac{2}{6}=$ $\qquad$
$11 \cdot \frac{10}{15}-\frac{3}{5}=$ $\qquad$
11. $\frac{9}{10}-\frac{10}{30}=$ $\qquad$
12. $\frac{6}{9}-\frac{1}{2}=$ $\qquad$
13. $\frac{4}{5}-\frac{3}{10}=$ $\qquad$
14. $\frac{18}{24}-\frac{5}{8}=$ $\qquad$
15. $\frac{24}{30}-\frac{1}{2}=$ $\qquad$
