

Name : \_\_\_\_\_

Score : \_\_\_\_\_

Teacher : \_\_\_\_\_

Date : \_\_\_\_\_

### Mixed Problems with Fractions

1 )  $\frac{2}{8} - \frac{1}{5} =$

2 )  $\frac{6}{7} + \frac{2}{9} =$

3 )  $\frac{3}{6} - \frac{1}{4} =$

4 )  $\frac{1}{6} + \frac{2}{5} =$

5 )  $\frac{8}{10} \times \frac{4}{7} =$

6 )  $\frac{2}{9} \div \frac{1}{2} =$

7 )  $\frac{1}{9} \div \frac{3}{5} =$

8 )  $\frac{2}{6} \times \frac{4}{7} =$

9 )  $\frac{1}{3} - \frac{1}{4} =$

10 )  $\frac{3}{10} \div \frac{6}{7} =$

11 )  $\frac{5}{8} \times \frac{2}{9} =$

12 )  $\frac{7}{8} + \frac{3}{4} =$



Simplify each rational expression. List any restrictions on the domain.

7.  $\frac{3x - 9}{x - 3}$

$$\frac{3x - 9}{x - 3} = \frac{3(\overset{1}{\cancel{x-3}})}{\overset{1}{\cancel{x-3}}}$$

$$= 3; x \neq 3$$

8.  $\frac{2xy - 2y}{x - 1}$

9.  $\frac{x^2 - 1}{x - 1}$

10.  $\frac{x - 5}{x^2 - 25}$

11.  $\frac{x^2 + x - 20}{x + 5}$

12.  $\frac{x^2 + 5x - 14}{x^2 + 8x + 7}$

13.  $\frac{x^3 - 1}{x - 1}$

14.  $\frac{x^2 - 2x - 8}{x^2 + 8x + 15}$