

## Solving Rational Equations

Date \_\_\_\_\_ Period \_\_\_\_\_

**Solve each equation. Remember to check for extraneous solutions.**

1)  $\frac{2}{x} = \frac{8}{x+5}$

2)  $\frac{x+7}{4} = \frac{x}{10}$

3)  $\frac{3}{x-1} = \frac{5}{x}$

4)  $\frac{x-4}{7} = \frac{x}{4}$

5)  $\frac{1}{v} = \frac{v-6}{5v} + \frac{1}{5v}$

6)  $\frac{2}{m} = \frac{m+3}{3m} + \frac{2}{3m}$

$$7) \frac{r-5}{5r} + \frac{1}{5r} = \frac{1}{r}$$

$$8) \frac{x+5}{5x} - \frac{1}{5x} = \frac{6}{x}$$

$$9) \frac{1}{k} = \frac{k+3}{6k} + \frac{1}{6k}$$

$$10) \frac{1}{2} + \frac{1}{2x} = \frac{1}{x}$$

$$11) 1 + \frac{1}{2x} = \frac{1}{x}$$

$$12) \frac{1}{6n} = \frac{2}{3} - \frac{2}{n}$$

$$13) \frac{5}{3b} = \frac{1}{3} - \frac{1}{3b}$$

$$14) \frac{5}{6} - \frac{5}{p} = \frac{1}{6p}$$