

Solving Rational Equations

Date _____ Period _____

Solve each equation. Remember to check for extraneous solutions.

1) $\frac{9}{x} = \frac{2}{x+4}$

2) $\frac{x-4}{7} = \frac{x}{2}$

3) $\frac{4}{4n} + \frac{n+4}{4n} = \frac{1}{4n}$

4) $\frac{n}{3n} + \frac{5}{3n} = \frac{1}{3n}$

5) $\frac{x-1}{6x^2} = \frac{6}{6x} - \frac{1}{6x}$

6) $\frac{1}{3x} = \frac{5}{x} - \frac{2x-12}{x}$

$$7) \frac{x-2}{x} = \frac{1}{2x} - \frac{x+4}{2x}$$

$$8) \frac{1}{n} - \frac{4}{n^2} = \frac{1}{n^2}$$

$$9) \frac{2x-8}{3x} + \frac{1}{3x} = 2$$

$$10) \frac{1}{4v} = \frac{1}{v} + 1$$

$$11) \frac{1}{3x} - \frac{x+5}{6x} = \frac{1}{x}$$

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