

Solving Rational Equations

Date _____ Period _____

Solve each equation.

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

2) $\frac{1}{4r} = \frac{1}{r} - \frac{r+3}{r^2}$

3) $\frac{1}{3a^2} + \frac{1}{3a} = \frac{1}{a^2}$

4) $\frac{6}{x^2} = \frac{4}{x} - \frac{2}{3x^2}$

5) $\frac{1}{2p^2} - \frac{1}{6p} = \frac{5}{3p^2}$

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

7) $\frac{1}{n^2} = \frac{5}{n} + \frac{2}{n^2}$

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

$$9) \frac{4}{3v^2} - \frac{1}{v} = \frac{v-4}{v^2}$$

$$10) \frac{1}{2v} + \frac{1}{6v^2} = \frac{1}{2v^2}$$

Solve each equation.

$$11) \frac{3}{x} + \frac{2}{x^2 + 4x} = \frac{1}{x^2 + 4x}$$

$$12) \frac{2}{x^2 + 2x} = \frac{4}{x+2} - \frac{1}{x^2 + 2x}$$

$$13) \frac{2}{x-4} - \frac{x+2}{x^2-4x} = \frac{2}{x}$$

$$14) \frac{2m+8}{m^2+2m} + \frac{m-3}{m^2+2m} = \frac{1}{m+2}$$

$$15) \frac{1}{2n} = \frac{1}{n+2} - \frac{1}{n}$$