

Practice - Rational Equations

Date _____ Period _____

Solve each equation. Remember to check for extraneous solutions.

1) $\frac{9a+9}{a^2} - \frac{1}{a^2} = \frac{1}{2a^2}$

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

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

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

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

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

7) $3 + \frac{1}{3x} = \frac{5x-10}{3x}$

8) $\frac{4}{k-1} + \frac{1}{k^2-5k+4} = \frac{3}{k^2-5k+4}$

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

10) $\frac{1}{3v} = \frac{v-5}{2v^2} + \frac{1}{2v^2}$

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

12) $1 + \frac{1}{5x} = \frac{6}{5x}$