

Solving Rational Equations

Date _____ Period _____

Solve each equation. Remember to check for extraneous solutions.

1) $\frac{3}{a} = \frac{1}{a} + \frac{1}{5}$

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

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

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

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

$$6) \frac{n^2+2n-15}{5n^2} = \frac{1}{n^2} + \frac{n^2+6n+5}{n^2}$$

$$7) \frac{1}{v+4} + \frac{4}{v^2+4v} = \frac{2}{v^2+4v}$$

$$8) \frac{2}{p} + \frac{1}{p} = \frac{6p+18}{p^2+2p}$$

$$9) \frac{6x-18}{x^3+5x^2} + \frac{x-3}{2x^2} = \frac{1}{2x}$$

$$10) \frac{v+5}{6v} + \frac{v^2-6v+5}{v} = 1$$