

Solving Rational Equations

Solve each equation. Remember to check for extraneous solutions.

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

$$4) \frac{b+6}{4b^2} + \frac{3}{2b^2} = \frac{b+4}{2b^2}$$

$$6) \frac{1}{6x^2} = \frac{1}{2x} + \frac{7}{6x^2}$$

$$8) \frac{1}{m^2 - m} + \frac{1}{m} = \frac{5}{m^2 - m}$$

$$10) \frac{1}{r-2} + \frac{1}{r^2 - 7r + 10} = \frac{6}{r-2}$$

$$12) \frac{r-4}{5r} = \frac{1}{5r} + 1$$

$$14) 1 = \frac{1}{x^2+2x} + \frac{x-1}{x}$$

$$16) \frac{r+5}{r^2-2r} - 1 = \frac{1}{r^2-2r}$$

$$18) \frac{a-2}{a+3} - 1 = \frac{3}{a+2}$$

$$20) \frac{5}{n^3+5n^2} = \frac{4}{n+5} + \frac{1}{n^2}$$