

Solving Rational Equations 1

Solve each equation. Remember to check for extraneous solutions.

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

2)
$$\frac{1}{n} = \frac{1}{5n} - \frac{n-1}{5n}$$

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

4)
$$\frac{4}{n^2} = \frac{5}{n} - \frac{1}{n^2}$$

5)
$$\frac{3n+15}{4n^2} = \frac{1}{n^2} - \frac{n-3}{4n^2}$$

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

7)
$$\frac{x-6}{x} = \frac{x+4}{x} + 1$$

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

9)
$$\frac{6b+18}{b^2} + \frac{1}{b} = \frac{3}{b}$$

10)
$$\frac{1}{2x} - \frac{x-1}{2x^2} = \frac{3}{x}$$