

Polynomial Functions – Rational Equations and Inequalities 3

Solve each equation. Check your solution.

$$1) \frac{k+4}{4} + \frac{k-1}{4} = \frac{k+4}{4k}$$

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

$$3) \frac{n^2 - n - 6}{n^2} - \frac{2n + 12}{n} = \frac{n - 6}{2n}$$

$$4) \frac{3x^2 + 24x + 48}{x^2} + \frac{x - 6}{2x^2} = \frac{1}{x^2}$$

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

$$6) \frac{k}{3} - \frac{1}{3k} = \frac{1}{k}$$

$$7) \frac{x-4}{6x} + \frac{x^2-3x-10}{6x} = \frac{x-1}{6}$$

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