

Solving Rational Equations

Solve each equation. Remember to check for extraneous solutions.

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

$$2) \frac{3x+15}{7x^2} - \frac{1}{7x^2} = \frac{x+6}{x^2}$$

$$3) \frac{1}{3r} = \frac{3r+9}{r^2} + \frac{8}{r^2}$$

$$4) \frac{7}{8} = \frac{1}{8} + \frac{1}{8n}$$

Solve each question. Round your answer to the nearest hundredth.

- 5) Shayna can sweep a porch in 15 minutes.
Heather can sweep the same porch in 9
minutes. How long would it take them if they
worked together?

Solve each equation. Remember to check for extraneous solutions.

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

$$7) \frac{1}{4v} + 1 = \frac{3}{2v}$$

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

$$9) \frac{1}{n} + \frac{1}{n^2} = \frac{n+1}{5n^2}$$

Solve each question. Round your answer to the nearest hundredth.

- 10) It takes Kayla 15 hours to pick forty bushels of apples. Jaidee can pick the same amount in 14 hours. If they worked together how long would it take them?