

Rational Equations HW

Solve each equation. Remember to check for extraneous solutions.

$$1) \frac{n-4}{4n^2} = \frac{3n+18}{2n^2} - \frac{1}{n^2}$$

$$2) \frac{1}{x^2} = \frac{4}{x^2} + \frac{x+5}{5x^2}$$

$$3) \frac{1}{v^2+11v+24} + \frac{5}{v+3} = \frac{1}{v+8}$$

$$4) \frac{1}{4b+28} = \frac{1}{4b^2+60b+224} - \frac{7b+7}{4b^2+60b+224}$$

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

$$6) \frac{1}{4} = \frac{1}{4b^2+8b} + \frac{b^2-6b+5}{4b^2+8b}$$

$$7) 1 + \frac{1}{v+7} = \frac{6v+18}{v^2+4v-21}$$

$$8) \frac{4}{m^2+3m-4} + \frac{m}{m-1} = \frac{1}{m^2+3m-4}$$