

P 257 Chapter test Requested HW answers

$$3) pq^4(p^{-1}q^2)^{-2} = pq^4p^2q^{-4} = pq^4p^2q^{-4} = p^3$$

$$7) \frac{3x - 2}{x^2 - x - 12} = \frac{3x - 2}{(x - 4)(x + 3)}$$

$$8) \frac{x^2 - x - 12}{3x - 2} = \frac{(x - 4)(x + 3)}{3x - 2}$$

$$16) \frac{x^2 - x - 12}{3x - 2} = \frac{(x - 4)(x + 3)}{3x - 2}$$

$$16) \frac{x^2}{9} = \frac{x + 2}{2}$$

$$\frac{18}{1} \left(\frac{x^2}{9} \right) = \left(\frac{x + 2}{2} \right) \frac{18}{1}$$

$$2x^2 = 9(x + 2)$$

$$2x^2 = 9x + 18$$

$$2x^2 - 9x - 18 = 0$$

$$2x^2 - 12x + 3x - 18 = 0$$

$$2x(x - 6) + 3(x - 6) = 0$$

$$(2x + 3)(x - 6) = 0$$

$$x = -\frac{3}{2} \text{ or } 6$$