

6.1.117 Find the missing factor.

$$x^2 - 8x^{-1} + 3x^{-2} = x^{-2} \cdot ?$$

← Find 3 terms.

$$x^2 - 8x^{-1} + 3x^{-2} = x^{-2} \cdot (\quad)$$

$$x^{-2} \cdot (\text{1st term}) = x^2$$

$$\text{1st term} = \frac{x^2}{x^{-2}} = x^{2 - (-2)} = x^4$$

$$x^{-2} \cdot (\text{2nd term}) = -8x^{-1}$$

$$(\text{2nd term}) = \frac{-8x^{-1}}{x^{-2}} = -8x^{-1 - (-2)} = -8x$$

$$x^{-2} \cdot (\text{3rd term}) = 3x^{-2}$$

$$(\text{3rd term}) = \frac{3x^{-2}}{x^{-2}} = 3$$

Solution

$$x^{-2}(x^4 - 8x + 3)$$