

1. Effectue.

$$a) \frac{3}{4}a^3b \cdot \frac{-32}{27}b^4c =$$

$$b) \frac{-3}{2}xyz \cdot \frac{5}{6}x^2y \cdot -9yz =$$

2. Quel est le facteur manquant ?

$$a) 3ab \cdot \underline{\quad} = 12a^2b$$

$$b) -2an \cdot \underline{\quad} = 6a^2n^2$$

$$c) \underline{\quad} \cdot \frac{3abc}{7} = -12a^2bc$$

3. Effectue.

$$a) \frac{-2x}{9} \left(-3x^2 + \frac{27xy}{8} - \frac{99}{10} \right) =$$

$$b) 5(x^2 + 3) - 3x^2 =$$

$$c) \left(\frac{3}{4}x^2y^3 \right)^2 =$$

$$d) (4x^2 - 8x + 16) \cdot \left(\frac{-3x}{4} \right) =$$

$$e) \frac{5}{9}x^2 \cdot \frac{12}{5}xy \cdot \frac{-3}{4}x^3y^2 \left(8xy - \frac{12}{5}x^2y^2 \right) =$$

4. Effectue.

$$a) (2a + 3)(a + 8) =$$

$$b) (2x^2 - x)(8 - x) =$$

$$c) (y + 5)(y - 5) =$$

$$d) \left(\frac{2x}{3} - \frac{3y}{7} \right)^2 =$$

$$e) \left(\frac{m}{3} + \frac{3n}{2} \right) \left(8m - \frac{n}{4} \right) =$$

Corrigé

$$1a) \frac{-8}{9}a^3b^5c$$

$$b) \frac{45}{4}x^3y^3z^2$$

$$2a) 4a$$

$$b) -3an$$

$$c) -28a$$

$$3a) \frac{2x^3}{3} - \frac{3x^2y}{4} + \frac{11x}{5}$$

$$b) 2x^2 + 15$$

$$c) \frac{9}{16}x^4y^6$$

$$d) -3x^3 + 6x^2 - 12x$$

$$e) -8x^7y^4 + \frac{12}{5}x^8y^5$$

$$4a) 2a^2 + 19a + 24$$

$$b) 17x^2 - 2x^3 - 8x$$

$$c) y^2 - 25$$

$$d) \frac{4x^2}{9} - \frac{4xy}{7} + \frac{9}{49}y^2$$

$$e) \frac{8m^2}{3} - \frac{3n^2}{8} + \frac{143mn}{12}$$