

Feuille d'exercices n°C4F2 : Réduire des expressions littérales

Exercice 1 : (Sur cette feuille) Réduire ces produits :

$$A = x \times 2 \times x \times 7$$

$$A = \dots$$

$$B = a \times 5 \times 6b$$

$$B = \dots$$

$$C = 3x \times 4y$$

$$C = \dots$$

$$D = 2a \times 6b \times 4a$$

$$D = \dots$$

Exercice 2 : (Sur cette feuille) Simplifier les expressions suivantes :

$$A = 2a + 3a = \dots$$

$$B = 2b - b = \dots$$

$$E = x + x = \dots$$

$$G = 3x \times 2x = \dots$$

$$C = 2x + 5x - 3x = \dots$$

$$F = x + x + x + y + y + y + y = \dots$$

$$D = 2a + 5x - x + 3a = \dots$$

$$I = x + x + x + y + y + y + y = \dots$$

Exercice 3 : (Sur votre cahier) Simplifier les expressions suivantes :

$$A = (-2b) \times 5 \times x \times 3a$$

$$B = x \times 3a \times (-3x) \times (-4)$$

$$C = 2b - 5b$$

$$A = \dots$$

$$B = \dots$$

$$C = \dots$$

$$A = \dots$$

$$B = \dots$$

$$D = 2b \times 5b = \dots$$

$$E = 2b \times (-5b) = \dots$$

$$F = 5x - 4 + 7x - 8x + 6 = \dots$$

$$G = 4y + 5 - 2y^2 + y - 8y^2 - 3y - 11$$

$$H = x + x \times 3$$

$$I = a + a \times 3a$$

$$G = \dots$$

$$H = \dots$$

$$I = \dots$$

$$G = \dots$$

$$J = x + 4 \times 3x - 5x$$

$$K = 2(3x + 5x)$$

$$L = 5b - 6a \times 4c + 3 - 7b + 2c \times 12a$$

$$J = \dots = \dots$$

$$K = \dots$$

$$L = \dots$$

C4F2 : CORRECTION

Exercice 1 : (Sur cette feuille) Réduire ces produits :

$$A = x \times 2 \times x \times 7$$

$$A = 7 \times 2 \times x \times x = 14x^2$$

$$B = a \times 5 \times 6b$$

$$B = 5 \times 6 \times a \times b = 30ab$$

$$C = 3x \times 4y$$

$$C = 3 \times 4 \times x \times y = 12xy$$

$$D = 2a \times 6b \times 4a$$

$$D = 2 \times 6 \times 4a \times a \times b = 48a^2b$$

Exercice 2 : (Sur cette feuille) Simplifier les expressions suivantes :

$$A = 2a + 3a = 5a$$

$$E = x + x = 2x$$

$$B = 2b - b = b$$

$$G = 3x \times 2x = 6x^2$$

$$C = 2x + 5x - 3x = 4x$$

$$F = x + x + x + y + y + y + y = 2x + 4y$$

Exercice 3 : (Sur votre cahier) Simplifier les expressions suivantes :

$$A = (-2b) \times 5 \times x \times 3a$$

$$A = (-2) \times 5 \times 3 \times a \times b \times x$$

$$B = x \times 3a \times (-3x) \times (-4)$$

$$B = 3 \times (-3) \times (-4) \times a \times x \times x \times x$$

$$C = 2b - 5b$$

$$C = -3b$$

$$A = -30abx$$

$$D = 2b \times 5b = 10b^2$$

$$B = 36ax^2$$

$$E = 2b \times (-5b) = -10b^2$$

$$F = 5x - 4 + 7x - 8x + 6 = 4x + 2$$

$$G = 4y + 5 - 2y^2 + y - 8y^2 - 3y - 11$$

$$G = 4y + y - 3y - 2y^2 - 8y^2 - 11 + 5$$

$$G = 2y - 10y^2 - 6$$

$$J = x + 4 \times 3x - 5x$$

$$J = x + 12x - 5x = 8x$$

$$I = a + a \times 3a$$

$$I = a + 3a^2$$

$$K = 2(3x + 5x)$$

$$K = 2 \times 8x = 16x$$

$$L = 5b - 6a \times 4c + 3 - 7b + 2c \times 12a$$

$$L = 5b - 24ac + 3 - 7b + 24ac = -2b + 3$$