

Corrigé de l'exercice 1

Réduire, si possible, les expressions suivantes :

►1. $A = -9y^2 \times (-5)$

$$A = -9 \times y^2 \times (-5)$$

$$A = -9 \times (-5) \times y^2$$

$$A = 45y^2$$

►2. $B = -8t \times 5$

$$B = -8 \times t \times 5$$

$$B = -8 \times 5 \times t$$

$$B = -40t$$

►3. $C = -10y^2 \times (-9)$

$$C = -10 \times y^2 \times (-9)$$

$$C = -10 \times (-9) \times y^2$$

$$C = 90y^2$$

►4. $D = 2y^2 \times 10$

$$D = 2 \times y^2 \times 10$$

$$D = 2 \times 10 \times y^2$$

$$D = 20y^2$$

►5. $E = a^2 - (-4a^2)$

$$E = (1 + 4)a^2$$

$$E = 5a^2$$

►6. $F = 5a^2 + 3a$

►7. $G = -4y^2 - 2y^2$

$$G = (-4 - 2)y^2$$

$$G = -6y^2$$

►8. $H = 9y^2 - 2y^2$

$$H = (9 - 2)y^2$$

$$H = 7y^2$$

►9. $I = 9x \times 3$

$$I = 9 \times x \times 3$$

$$I = 9 \times 3 \times x$$

$$I = 27x$$

Corrigé de l'exercice 2

Réduire, si possible, les expressions suivantes :

►1. $A = x^2 - 6x^2$

$$A = (1 - 6)x^2$$

$$A = -5x^2$$

►2. $B = 9 \times (-8y^2)$

$$B = 9 \times (-8) \times y^2$$

$$B = -72y^2$$

►3. $C = -4y \times 9y$

$$C = -4 \times y \times 9 \times y$$

$$C = -4 \times 9 \times y \times y$$

$$C = -36y^2$$

►4. $D = -8a \times 2$

$$D = -8 \times a \times 2$$

$$D = -8 \times 2 \times a$$

$$D = -16a$$

►5. $E = 4y - 2y$

$$E = (4 - 2)y$$

$$E = 2y$$

►6. $F = 10x^2 + 6x$

►7. $G = 2 \times (-5a^2)$

$$G = 2 \times (-5) \times a^2$$

$$G = -10a^2$$

►8. $H = 9t \times 10t$

$$H = 9 \times t \times 10 \times t$$

$$H = 9 \times 10 \times t \times t$$

$$H = 90t^2$$

►9. $I = -8t - 10t^2$

$$I = -10t^2 - 8t$$

Corrigé de l'exercice 3

Réduire, si possible, les expressions suivantes :

►1. $A = 2x^2 - (-7x^2)$

$$A = (2 + 7)x^2$$

$$A = 9x^2$$

►2. $B = 3a \times 6a$

$$B = 3 \times a \times 6 \times a$$

$$B = 3 \times 6 \times a \times a$$

$$B = 18a^2$$

►3. $C = y^2 + 7y^2$

$$C = (1 + 7)y^2$$

$$C = 8y^2$$

►4. $D = -2 \times 4a$

$$D = -2 \times 4 \times a$$

$$D = -8a$$

►5. $E = 5t^2 - t$

►6. $F = 8y - (-2y)$

$$F = (8 + 2)y$$

$$F = 10y$$

►7. $G = 5y - (-9y)$

$$G = (5 + 9)y$$

$$\begin{aligned} G &= 14y \\ \blacktriangleright 8. \quad H &= 10 \times 2a \\ H &= 10 \times 2 \times a \end{aligned}$$

$$\begin{aligned} H &= 20a \\ \blacktriangleright 9. \quad I &= -3a^2 \times 2 \\ I &= -3 \times a^2 \times 2 \end{aligned}$$

$$\begin{aligned} I &= -3 \times 2 \times a^2 \\ I &= -6a^2 \end{aligned}$$

Corrigé de l'exercice 4

Réduire, si possible, les expressions suivantes :

$$\begin{aligned} \blacktriangleright 1. \quad A &= -5 \times (-6x^2) \\ A &= -5 \times (-6) \times x^2 \\ A &= 30x^2 \\ \blacktriangleright 2. \quad B &= -8 \times 2a^2 \\ B &= -8 \times 2 \times a^2 \\ B &= -16a^2 \\ \blacktriangleright 3. \quad C &= -3t^2 - (-10t^2) \\ C &= (-3 + 10)t^2 \\ C &= 7t^2 \end{aligned}$$

$$\begin{aligned} \blacktriangleright 4. \quad D &= -7x^2 + 9x^2 \\ D &= (-7 + 9)x^2 \\ D &= 2x^2 \\ \blacktriangleright 5. \quad E &= 5t + 2t \\ E &= (5 + 2)t \\ E &= 7t \\ \blacktriangleright 6. \quad F &= -7y^2 - 9y^2 \\ F &= (-7 - 9)y^2 \\ F &= -16y^2 \end{aligned}$$

$$\begin{aligned} \blacktriangleright 7. \quad G &= -6x - (-10x) \\ G &= (-6 + 10)x \\ G &= 4x \\ \blacktriangleright 8. \quad H &= 1 \times 7x^2 \\ H &= 1 \times 7 \times x^2 \\ H &= 7x^2 \\ \blacktriangleright 9. \quad I &= 5t - 8t \\ I &= (5 - 8)t \\ I &= -3t \end{aligned}$$

Corrigé de l'exercice 5

Réduire, si possible, les expressions suivantes :

$$\begin{aligned} \blacktriangleright 1. \quad A &= -1 \times 5x \\ A &= -1 \times 5 \times x \\ A &= -5x \\ \blacktriangleright 2. \quad B &= 6y^2 - (-3y^2) \\ B &= (6 + 3)y^2 \\ B &= 9y^2 \\ \blacktriangleright 3. \quad C &= -9x - 3x \\ C &= (-9 - 3)x \\ C &= -12x \end{aligned}$$

$$\begin{aligned} \blacktriangleright 4. \quad D &= -9a \times 5 \\ D &= -9 \times a \times 5 \\ D &= -9 \times 5 \times a \\ D &= -45a \\ \blacktriangleright 5. \quad E &= 6x^2 + x \\ \blacktriangleright 6. \quad F &= -2a^2 + 8a^2 \\ F &= (-2 + 8)a^2 \\ F &= 6a^2 \\ \blacktriangleright 7. \quad G &= -7t^2 - 9t^2 \\ G &= (-7 - 9)t^2 \\ G &= -16t^2 \end{aligned}$$

$$\begin{aligned} \blacktriangleright 8. \quad H &= 8t^2 + 2t^2 \\ H &= (8 + 2)t^2 \\ H &= 10t^2 \\ \blacktriangleright 9. \quad I &= -5t \times 4t \\ I &= -5 \times t \times 4 \times t \\ I &= -5 \times 4 \times t \times t \\ I &= -20t^2 \end{aligned}$$

Corrigé de l'exercice 6

Réduire, si possible, les expressions suivantes :

$$\begin{aligned} \blacktriangleright 1. \quad A &= -5a \times a \\ A &= -5 \times a \times a \\ A &= -5a^2 \end{aligned}$$

$$\begin{aligned} \blacktriangleright 2. \quad B &= 5a - 9a \\ B &= (5 - 9)a \\ B &= -4a \end{aligned}$$

$$\begin{aligned} \blacktriangleright 3. \quad C &= -2x - (-8) \\ C &= -2x + 8 \\ \blacktriangleright 4. \quad D &= -9t \times (-9) \\ D &= -9 \times t \times (-9) \end{aligned}$$

$$D = -9 \times (-9) \times t$$

$$D = 81t$$

►5. $E = 3y - 6y$

$$E = (3 - 6)y$$

$$E = -3y$$

►6. $F = -4x \times (-10x)$

$$F = -4 \times x \times (-10) \times x$$

$$F = -4 \times (-10) \times x \times x$$

$$F = 40x^2$$

►7. $G = -9t^2 + 6t^2$

$$G = (-9 + 6)t^2$$

$$G = -3t^2$$

►8. $H = -t \times 8$

$$H = -1 \times t \times 8$$

$$H = -1 \times 8 \times t$$

$$H = -8t$$

►9. $I = -x^2 \times 5$

$$I = -1 \times x^2 \times 5$$

$$I = -1 \times 5 \times x^2$$

$$I = -5x^2$$