

**Exercice 1**

Réduire, si possible, les expressions suivantes :

▶1.  $A = -x^2 - (-x)$

▶2.  $B = 4t - (-8t)$

▶3.  $C = -a \times (-3)$

▶4.  $D = -2 \times 6y^2$

▶5.  $E = -3x^2 + 4$

▶6.  $F = 1 \times 2a$

▶7.  $G = -6x^2 - 4x$

▶8.  $H = a \times 4a$

▶9.  $I = -10a^2 - 6a^2$

**Exercice 2**

Réduire, si possible, les expressions suivantes :

▶1.  $A = -4y^2 \times 9$

▶2.  $B = -2 \times (-5y^2)$

▶3.  $C = -8t^2 - 3t^2$

▶4.  $D = 3x^2 \times (-1)$

▶5.  $E = -3x^2 + 2x^2$

▶6.  $F = -5x - (-9x)$

▶7.  $G = 7t - 1$

▶8.  $H = 8x \times 10$

▶9.  $I = -5t^2 \times 10$

**Exercice 3**

Réduire, si possible, les expressions suivantes :

▶1.  $A = -5x - 10x^2$

▶2.  $B = -7y^2 \times 10$

▶3.  $C = 2a^2 - 3a^2$

▶4.  $D = -10y - 9y$

▶5.  $E = -7 \times (-3x)$

▶6.  $F = -7a \times 3a$

▶7.  $G = -2x^2 + 6x^2$

▶8.  $H = -4x^2 \times (-3)$

▶9.  $I = -9y + 8y$

**Exercice 4**

Réduire, si possible, les expressions suivantes :

▶1.  $A = -10a^2 \times (-1)$

▶2.  $B = -10x^2 + 10x^2$

▶3.  $C = -10 \times (-6y^2)$

▶4.  $D = -9x + x^2$

▶5.  $E = 9t^2 - (-2t^2)$

▶6.  $F = 2x^2 + 7x^2$

▶7.  $G = -2a^2 - 7$

▶8.  $H = 10y \times (-6y)$

▶9.  $I = 8t^2 \times 9$

**Exercice 5**

Réduire, si possible, les expressions suivantes :

▶1.  $A = -x^2 \times 2$

▶2.  $B = 8y + 3y$

▶3.  $C = -10y^2 \times (-2)$

▶4.  $D = -4y - 4y$

▶5.  $E = 9y^2 \times 1$

▶6.  $F = 6x - 3x$

▶7.  $G = 7y^2 \times (-8)$

▶8.  $H = -3 \times 7a$

▶9.  $I = 9y^2 - (-2y)$

**Exercice 6**

Réduire, si possible, les expressions suivantes :

▶1.  $A = -4a - 6a$

▶2.  $B = 3y \times (-8y)$

▶3.  $C = 9x \times 1$

▶4.  $D = 2x^2 - (-9x^2)$

▶5.  $E = -5y^2 + 2y^2$

▶6.  $F = 10a^2 \times 7$

▶7.  $G = -2y \times (-5y)$

▶8.  $H = -10t - (-6t)$

▶9.  $I = 8a - (-8a)$

**Corrigé de l'exercice 1**

Réduire, si possible, les expressions suivantes :

▶1.  $A = -x^2 - (-x)$

$$A = -x^2 + x$$

▶2.  $B = 4t - (-8t)$

$$B = (4 + 8)t$$

$$B = 12t$$

▶3.  $C = -a \times (-3)$

$$C = -1 \times a \times (-3)$$

$$C = -1 \times (-3) \times a$$

$$C = 3a$$

▶4.  $D = -2 \times 6y^2$

$$D = -2 \times 6 \times y^2$$

$$D = -12y^2$$

▶5.  $E = -3x^2 + 4$

▶6.  $F = 1 \times 2a$

$$F = 1 \times 2 \times a$$

$$F = 2a$$

▶7.  $G = -6x^2 - 4x$

▶8.  $H = a \times 4a$

$$H = a \times 4 \times a$$

$$H = 4 \times a \times a$$

$$H = 4a^2$$

▶9.  $I = -10a^2 - 6a^2$

$$I = (-10 - 6)a^2$$

$$I = -16a^2$$

**Corrigé de l'exercice 2**

Réduire, si possible, les expressions suivantes :

▶1.  $A = -4y^2 \times 9$

$$A = -4 \times y^2 \times 9$$

$$A = -4 \times 9 \times y^2$$

$$A = -36y^2$$

▶2.  $B = -2 \times (-5y^2)$

$$B = -2 \times (-5) \times y^2$$

$$B = 10y^2$$

▶3.  $C = -8t^2 - 3t^2$

$$C = (-8 - 3)t^2$$

$$C = -11t^2$$

▶4.  $D = 3x^2 \times (-1)$

$$D = 3 \times x^2 \times (-1)$$

$$D = 3 \times (-1) \times x^2$$

$$D = -3x^2$$

▶5.  $E = -3x^2 + 2x^2$

$$E = (-3 + 2)x^2$$

$$E = -x^2$$

▶6.  $F = -5x - (-9x)$

$$F = (-5 + 9)x$$

$$F = 4x$$

▶7.  $G = 7t - 1$

▶8.  $H = 8x \times 10$

$$H = 8 \times x \times 10$$

$$H = 8 \times 10 \times x$$

$$H = 80x$$

▶9.  $I = -5t^2 \times 10$

$$I = -5 \times t^2 \times 10$$

$$I = -5 \times 10 \times t^2$$

$$I = -50t^2$$

**Corrigé de l'exercice 3**

Réduire, si possible, les expressions suivantes :

▶1.  $A = -5x - 10x^2$

$$A = -10x^2 - 5x$$

▶2.  $B = -7y^2 \times 10$

$$B = -7 \times y^2 \times 10$$

$$B = -7 \times 10 \times y^2$$

$$B = -70y^2$$

▶3.  $C = 2a^2 - 3a^2$

$$C = (2 - 3)a^2$$

$$C = -a^2$$

▶4.  $D = -10y - 9y$

$$D = (-10 - 9)y$$

$$D = -19y$$

▶5.  $E = -7 \times (-3x)$

$$E = -7 \times (-3) \times x$$

$$E = 21x$$

▶6.  $F = -7a \times 3a$

$$F = -7 \times a \times 3 \times a$$

$$F = -7 \times 3 \times a \times a$$

$$F = -21a^2$$

▶7.  $G = -2x^2 + 6x^2$

$$G = (-2 + 6)x^2$$

$$G = 4x^2$$

$$\begin{aligned} \text{►8. } H &= -4x^2 \times (-3) \\ H &= -4 \times x^2 \times (-3) \\ H &= -4 \times (-3) \times x^2 \end{aligned}$$

$$\begin{aligned} H &= 12x^2 \\ \text{►9. } I &= -9y + 8y \\ I &= (-9 + 8)y \end{aligned}$$

$$I = -y$$

### Corrigé de l'exercice 4

Réduire, si possible, les expressions suivantes :

$$\begin{aligned} \text{►1. } A &= -10a^2 \times (-1) \\ A &= -10 \times a^2 \times (-1) \\ A &= -10 \times (-1) \times a^2 \\ A &= 10a^2 \end{aligned}$$

$$\begin{aligned} \text{►2. } B &= -10x^2 + 10x^2 \\ B &= (-10 + 10)x^2 \\ B &= 0 \end{aligned}$$

$$\begin{aligned} \text{►3. } C &= -10 \times (-6y^2) \\ C &= -10 \times (-6) \times y^2 \\ C &= 60y^2 \end{aligned}$$

$$\begin{aligned} \text{►4. } D &= -9x + x^2 \\ D &= x^2 - 9x \end{aligned}$$

$$\begin{aligned} \text{►5. } E &= 9t^2 - (-2t^2) \\ E &= (9 + 2)t^2 \end{aligned}$$

$$\begin{aligned} E &= 11t^2 \\ \text{►6. } F &= 2x^2 + 7x^2 \end{aligned}$$

$$\begin{aligned} F &= (2 + 7)x^2 \\ F &= 9x^2 \end{aligned}$$

$$\text{►7. } G = -2a^2 - 7$$

$$\text{►8. } H = 10y \times (-6y)$$

$$H = 10 \times y \times (-6) \times y$$

$$H = 10 \times (-6) \times y \times y$$

$$H = -60y^2$$

$$\text{►9. } I = 8t^2 \times 9$$

$$I = 8 \times t^2 \times 9$$

$$I = 8 \times 9 \times t^2$$

$$I = 72t^2$$

### Corrigé de l'exercice 5

Réduire, si possible, les expressions suivantes :

$$\begin{aligned} \text{►1. } A &= -x^2 \times 2 \\ A &= -1 \times x^2 \times 2 \\ A &= -1 \times 2 \times x^2 \\ A &= -2x^2 \end{aligned}$$

$$\begin{aligned} \text{►2. } B &= 8y + 3y \\ B &= (8 + 3)y \\ B &= 11y \end{aligned}$$

$$\begin{aligned} \text{►3. } C &= -10y^2 \times (-2) \\ C &= -10 \times y^2 \times (-2) \\ C &= -10 \times (-2) \times y^2 \\ C &= 20y^2 \end{aligned}$$

$$\begin{aligned} \text{►4. } D &= -4y - 4y \\ D &= (-4 - 4)y \end{aligned}$$

$$D = -8y$$

$$\text{►5. } E = 9y^2 \times 1$$

$$E = 9 \times y^2 \times 1$$

$$E = 9 \times y^2$$

$$E = 9y^2$$

$$\text{►6. } F = 6x - 3x$$

$$F = (6 - 3)x$$

$$F = 3x$$

$$\text{►7. } G = 7y^2 \times (-8)$$

$$G = 7 \times y^2 \times (-8)$$

$$G = 7 \times (-8) \times y^2$$

$$G = -56y^2$$

$$\text{►8. } H = -3 \times 7a$$

$$H = -3 \times 7 \times a$$

$$H = -21a$$

$$\text{►9. } I = 9y^2 - (-2y)$$

$$I = 9y^2 + 2y$$

### Corrigé de l'exercice 6

Réduire, si possible, les expressions suivantes :

$$\begin{aligned} \text{►1. } A &= -4a - 6a \\ A &= (-4 - 6)a \end{aligned}$$

$$A = -10a$$

$$\text{►2. } B = 3y \times (-8y)$$

$$B = 3 \times y \times (-8) \times y$$

$$B = 3 \times (-8) \times y \times y$$

$$B = -24y^2$$

►3.  $C = 9x \times 1$

$$C = 9 \times x \times 1$$

$$C = 9 \times x$$

$$C = 9x$$

►4.  $D = 2x^2 - (-9x^2)$

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

$$D = 11x^2$$

►5.  $E = -5y^2 + 2y^2$

$$E = (-5 + 2) y^2$$

$$E = -3y^2$$

►6.  $F = 10a^2 \times 7$

$$F = 10 \times a^2 \times 7$$

$$F = 10 \times 7 \times a^2$$

$$F = 70a^2$$

►7.  $G = -2y \times (-5y)$

$$G = -2 \times y \times (-5) \times y$$

$$G = -2 \times (-5) \times y \times y$$

$$G = 10y^2$$

►8.  $H = -10t - (-6t)$

$$H = (-10 + 6) t$$

$$H = -4t$$

►9.  $I = 8a - (-8a)$

$$I = (8 + 8) a$$

$$I = 16a$$