

# Groupe des Instituts Excel

## Exercices

### Exercice 1

Développer chacune des expressions littérales suivantes :

$$\begin{array}{l} A = (9x + 3)^2 \\ B = (4x - 8)^2 \\ C = (7x - 2) \times (2x + 7) \end{array} \quad \left| \quad \begin{array}{l} D = (3x + 4) \times (3x - 4) \\ E = -(3x - 6)^2 \\ F = \left(\frac{3}{8}x + \frac{9}{7}\right)^2 \end{array}\right.$$

### Exercice 2

Développer chacune des expressions littérales suivantes :

$$\begin{array}{l} A = (6x - 5)^2 \\ B = (5x + 2)^2 \\ C = (10x + 2) \times (2x - 10) \end{array} \quad \left| \quad \begin{array}{l} D = (8x + 1) \times (8x - 1) \\ E = \left(\frac{4}{5}x - \frac{3}{2}\right)^2 \\ F = -(8x - 5) \times (8x + 5) \end{array}\right.$$

### Exercice 3

Développer chacune des expressions littérales suivantes :

$$\begin{array}{l} A = (4x - 9) \times (9x + 4) \\ B = (4x + 4) \times (4x - 4) \\ C = (2x + 6)^2 \end{array} \quad \left| \quad \begin{array}{l} D = (7x - 7)^2 \\ E = \left(\frac{5}{6}x - \frac{9}{7}\right) \times \left(\frac{5}{6}x + \frac{9}{7}\right) \\ F = -(7x - 7)^2 \end{array}\right.$$

### Exercice 4

Développer chacune des expressions littérales suivantes :

$$\begin{array}{l} A = (8x + 9)^2 \\ B = (2x - 9) \times (9x + 2) \\ C = (7x + 9) \times (7x - 9) \end{array} \quad \left| \quad \begin{array}{l} D = (x - 8)^2 \\ E = \left(\frac{2}{3}x - 4\right) \times \left(\frac{2}{3}x + 4\right) \\ F = -(2x + 4) \times (4x - 2) \end{array}\right.$$

### Exercice 5

Développer chacune des expressions littérales suivantes :

$$\begin{array}{l} A = (5x - 7) \times (7x + 5) \\ B = (x + 10)^2 \\ C = (10x - 4)^2 \\ D = (4x + 2) \times (4x - 2) \end{array} \quad \left| \quad \begin{array}{l} E = \left(\frac{1}{2}x - \frac{2}{5}\right)^2 \\ F = -(8x + 4)^2 \end{array}\right.$$

### Exercice 6

Développer chacune des expressions littérales suivantes :

$$\begin{array}{l} A = (10x - 3)^2 \\ B = (6x - 6) \times (6x + 6) \\ C = (6x + 9)^2 \end{array} \quad \left| \quad \begin{array}{l} D = (5x + 4) \times (4x - 5) \\ E = \left(5x + \frac{9}{5}\right)^2 \\ F = -(3x + 7) \times (7x - 3) \end{array}\right.$$