

# Groupe des Instituts Excel

## Exercices

### Exercice 1

Développer chacune des expressions littérales suivantes :

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

### Exercice 2

Développer chacune des expressions littérales suivantes :

$$\begin{array}{l} A = (9x + 4)^2 \\ B = (6x - 9)^2 \\ C = (2x - 1) \times (x + 2) \end{array} \quad \left| \quad \begin{array}{l} D = (2x + 9) \times (2x - 9) \\ E = \left(\frac{3}{8}x - \frac{2}{3}\right) \times \left(\frac{2}{3}x + \frac{3}{8}\right) \\ F = -(10x + 1)^2 \end{array}\right.$$

### Exercice 3

Développer chacune des expressions littérales suivantes :

$$\begin{array}{l} A = (x - 3) \times (3x + 1) \\ B = (9x - 6)^2 \\ C = (9x + 3) \times (9x - 3) \end{array} \quad \left| \quad \begin{array}{l} D = (6x + 10)^2 \\ E = -(10x + 5)^2 \\ F = \left(\frac{1}{7}x - \frac{9}{10}\right)^2 \end{array}\right.$$

### Exercice 4

Développer chacune des expressions littérales suivantes :

$$\begin{array}{l} A = (5x + 4)^2 \\ B = (6x - 3)^2 \\ C = (x - 8) \times (x + 8) \end{array} \quad \left| \quad \begin{array}{l} D = (6x - 3) \times (3x + 6) \\ E = -(5x + 7)^2 \\ F = \left(\frac{4}{3}x - \frac{1}{8}\right) \times \left(\frac{4}{3}x + \frac{1}{8}\right) \end{array}\right.$$

### Exercice 5

Développer chacune des expressions littérales suivantes :

$$\begin{array}{l} A = (6x - 1)^2 \\ B = (6x + 10)^2 \\ C = (9x - 2) \times (9x + 2) \end{array} \quad \left| \quad \begin{array}{l} D = (7x + 7) \times (7x - 7) \\ E = \left(7x + \frac{5}{4}\right) \times \left(7x - \frac{5}{4}\right) \\ F = -(3x - 8) \times (8x + 3) \end{array}\right.$$

### Exercice 6

Développer chacune des expressions littérales suivantes :

$$\begin{array}{l} A = (2x - 8) \times (8x + 2) \\ B = (x + 9)^2 \\ C = (7x - 8) \times (7x + 8) \end{array} \quad \left| \quad \begin{array}{l} D = (3x - 7)^2 \\ E = -(9x - 10) \times (9x + 10) \\ F = \left(\frac{4}{5}x + \frac{1}{3}\right) \times \left(\frac{1}{3}x - \frac{4}{5}\right) \end{array}\right.$$