

**EX 1**

Développer et réduire les expressions suivantes.

3L11-1

$$A = (2x + 4)(5x + 2)$$

$$E = (6x + 4)(4x + 8)$$

$$B = (x + 7)(x + 11)$$

$$F = (x + 9)(x + 8)$$

$$C = (x + 5)(x + 12)$$

$$D = (6x + 9)(3x + 2)$$

**EX 2**

Développer et réduire les expressions suivantes.

3L11-1

$$A = (9x - 4)(8x - 2)$$

$$E = (2x - 8)(7x + 3)$$

$$B = (2x - 9)(6x + 3)$$

$$F = (5x - 7)(9x - 8)$$

$$C = (8x - 4)(4x - 9)$$

$$D = (6x - 9)(7x + 5)$$

**EX 3**

Développer et réduire les expressions suivantes.

3L11-3

$$A = 10 - (-8x + 2)(-4x + 3)$$

$$E = (2x \times 3)(4x - 8)$$

$$B = -4x + (x + 1)(-6x - 7)$$

$$F = 1 + (5x + 3)(10x - 5)$$

$$C = -6(4x - 6) - (8 + 7x)$$

$$D = 9x + 10(8x - 2)$$



## Corrections

EX  
1

$$A = (2x + 4)(5x + 2) = 10x^2 + 4x + 20x + 8 = 10x^2 + 24x + 8$$

$$B = (x + 7)(x + 11) = x^2 + 7x + 11x + 77 = x^2 + 18x + 77$$

$$C = (x + 5)(x + 12) = x^2 + 5x + 12x + 60 = x^2 + 17x + 60$$

$$D = (6x + 9)(3x + 2) = 18x^2 + 12x + 27x + 18 = 18x^2 + 39x + 18$$

$$E = (6x + 4)(4x + 8) = 24x^2 + 48x + 16x + 32 = 24x^2 + 64x + 32$$

$$F = (x + 9)(x + 8) = x^2 + 9x + 8x + 72 = x^2 + 17x + 72$$

EX  
2

$$A = (9x - 4)(8x - 2) = 72x^2 - 18x - 32x + 8 = 72x^2 - 50x + 8$$

$$B = (2x - 9)(6x + 3) = 12x^2 + 6x - 54x - 27 = 12x^2 - 48x - 27$$

$$C = (8x - 4)(4x - 9) = 32x^2 - 72x - 16x + 36 = 32x^2 - 88x + 36$$

$$D = (6x - 9)(7x + 5) = 42x^2 + 30x - 63x - 45 = 42x^2 - 33x - 45$$

$$E = (2x - 8)(7x + 3) = 14x^2 + 6x - 56x - 24 = 14x^2 - 50x - 24$$

$$F = (5x - 7)(9x - 8) = 45x^2 - 40x - 63x + 56 = 45x^2 - 103x + 56$$

EX  
3

$$\begin{aligned} A &= 10 - (-8x + 2)(-4x + 3) \\ &= 10 - (32x^2 - 24x - 8x + 6) \\ &= 10 - 32x^2 + 24x + 8x - 6 \\ &= -32x^2 + 32x + 4 \end{aligned}$$

$$\begin{aligned} B &= -4x + (x + 1)(-6x - 7) \\ &= -4x - 6x^2 - 7x - 6x - 7 \\ &= -6x^2 - 17x - 7 \end{aligned}$$

$$\begin{aligned} C &= -6(4x - 6) - (8 + 7x) \\ &= -24x + 36 - (8 + 7x) \\ &= -24x + 36 - 8 - 7x \\ &= -31x + 28 \end{aligned}$$

$$\begin{aligned} D &= 9x + 10(8x - 2) \\ &= 9x + 80x - 20 \\ &= 89x - 20 \end{aligned}$$

$$\begin{aligned} E &= (2x \times 3)(4x - 8) \\ &= 6x \times (4x - 8) \\ &= 24x^2 - 48x \end{aligned}$$

$$\begin{aligned} F &= 1 + (5x + 3)(10x - 5) \\ &= 1 + 50x^2 - 25x + 30x - 15 \\ &= 50x^2 + 5x - 14 \end{aligned}$$