Exercice 1

Développer et réduire les expressions suivantes.

$A = (-x \times 2)(3x + 6)$

$B = 6 - (-10x - 9)(-11x + 5)$

$C = -2x + (-4x + 6)(11x - 8)$

$D = 6(-7x - 10) - (-8 - 5x)$

$E = -8x - 11(-2x + 2)$

$F = -8 + (-8x + 1)(x - 8)$

$G = -3x + (4x + 3)$

$H = 8 + (10x - 9)(-9x + 5)$

$I = (-3x \times 2)(10x - 4)$

$J = -7x + (8x + 3)(6x - 7)$

$K = -9(-8x + 7) - (-7 + 11x)$

$L = -1 - (6x - 3)(2x + 8)$

$M = -3x - 10(-9x - 8)$

$N = (3x \times 3)(-4x - 9)$

$O = 8(-9x - 2) - (8 - 8x)$

$P = -3x + (x - 7)(x + 5)$

$Q = -8 + (6x - 8)(-7x - 10)$

$R = -3 - (-2x + 1)(7x + 10)$

$$S = (-2x \times 3)(6x - 11)$$

$$T = 5x + 6(10x - 7)$$

Exercice 1

1. $A = (-x \times 2)(3x + 6)$
   $= -2x \times (3x + 6)$
   $= -6x^2 - 12x$

2. $B = 6 - (-10x - 9)(-11x + 5)$
   $= 6 - (110x^2 - 50x + 99x - 45)$
   $= 6 - 110x^2 + 50x - 99x + 45$
   $= -110x^2 - 49x + 51$

3. $C = -2x + (-4x + 6)(11x - 8)$
   $= -2x - 44x^2 + 32x + 66x - 48$
   $= -44x^2 + 96x - 48$

4. $D = 6(-7x - 10) - (-8 - 5x)$
   $= -42x - 60 - (-8 - 5x)$
   $= -42x - 60 + 8 + 5x$
   $= -37x - 52$

5. $E = -8x - 11(-2x + 2)$
   $= -8x + 22x - 22$
   $= 14x - 22$

6. $F = -8 + (-8x + 1)(x - 8)$
   $= -8 - 8x^2 + 64x + x - 8$
   $= -8x^2 + 65x - 16$

7. $G = -3x + (4x + 3)$
   $= -3x + 4x + 3$
   $= x + 3$

8. $H = 8 + (10x - 9)(-9x + 5)$
   $= 8 - 90x^2 + 50x + 81x - 45$
   $= -90x^2 + 131x - 37$

9. $I = (-3x \times 2)(10x - 4)$
   $= -6x \times (10x - 4)$
   $= -60x^2 + 24x$

10. $J = -7x + (8x + 3)(6x - 7)$
    $= -7x + 48x^2 - 56x + 18x - 21$
    $= 48x^2 - 45x - 21$

11. $K = -9(-8x + 7) - (-7 + 11x)$
$$= 72x - 63 - (-7 + 11x)$$
$$= 72x - 63 + 7 - 11x$$
$$= 61x - 56$$

12. $L = -1 - (6x - 3)(2x + 8)$
$$= -1 - (12x^2 + 48x - 6x - 24)$$
$$= -1 - 12x^2 - 48x + 6x + 24$$
$$= -12x^2 - 42x + 23$$

13. $M = -3x - 10(-9x - 8)$
$$= -3x + 90x + 80$$
$$= 87x + 80$$

14. $N = (3x \times 3)(-4x - 9)$
$$= 9x \times (-4x - 9)$$
$$= -36x^2 - 81x$$

15. $O = 8(-9x - 2) - (8 - 8x)$
$$= -72x - 16 - (8 - 8x)$$
$$= -72x - 16 - 8 + 8x$$
$$= -64x - 24$$

16. $P = -3x + (x - 7)(x + 5)$
$$= -3x + x^2 + 5x - 7x - 35$$
$$= x^2 - 5x - 35$$

17. $Q = -8 + (6x - 8)(-7x - 10)$
$$= -8 - 42x^2 - 60x + 56x + 80$$
$$= -42x^2 - 4x + 72$$

18. $R = -3 - (-2x + 1)(7x + 10)$
$$= -3 - (-14x^2 - 20x + 7x + 10)$$
$$= -3 + 14x^2 + 20x - 7x - 10$$
$$= 14x^2 + 13x - 13$$

19. $S = (-2x \times 3)(6x - 11)$
$$= -6x \times (6x - 11)$$
$$= -36x^2 + 66x$$

20. $T = 5x + 6(10x - 7)$
$$= 5x + 60x - 42$$
$$= 65x - 42$$