

Exercice 1

Évaluer les expressions suivantes

1. $-x - 5$ en $x = 6$

Solution:

$$A = -6 - 5$$

$$A = -6 - 5$$

$$A = -11$$

2. $-x + 8$ en $x = 1$

Solution:

$$A = -1 + 8$$

$$A = -1 + 8$$

$$A = 7$$

3. $-x + 8$ en $x = 3$

Solution:

$$A = -3 + 8$$

$$A = -3 + 8$$

$$A = 5$$

4. $-10x^2 + x - 6$ en $x = 7$

Solution:

$$A = -10 \times 7^2 + 7 - 6$$

$$A = -10 \times 49 + 7 - 6$$

$$A = -490 + 7 - 6$$

$$A = -483 - 6$$

$$A = -489$$

5. $-10x^2 + x - 6$ en $x = -5$

Solution:

$$A = -10 \times (-5)^2 - 5 - 6$$

$$A = -10 \times 25 - 5 - 6$$

$$A = -250 - 5 - 6$$

$$A = -255 - 6$$

$$A = -261$$

6. $-10x^2 + x + 10$ en $x = 8$

Solution:

$$A = -10 \times 8^2 + 8 + 10$$

$$A = -10 \times 64 + 8 + 10$$

$$A = -640 + 8 + 10$$

$$A = -632 + 10$$

$$A = -622$$

7. $-7x(x - (-7))$ en $x = -10$

8. $-7x(x - (-7))$ en $x = -10$

9. $(8x + 7)(-5 - 2x)$ en $x = -2$

Exercice 2

Réduis les expressions suivantes

1. $A = x + 1 + x - 4$

Solution:

$$A = x + 1 + x - 4$$

$$A = x + x + 1 - 4$$

$$A = (1 + 1)x + 1 - 4$$

$$A = 2x - 3$$

2. $B = x + 6 + 3 + x - 6$

Solution:

$$A = x + 6 + 3 + x - 6$$

$$A = x + 9 + x - 6$$

$$A = x + x + 9 - 6$$

$$A = (1 + 1)x + 9 - 6$$

$$A = 2x + 3$$

3. $C = -3x + 5 + 5x$

Solution:

$$A = -3x + 5 + 5x$$

$$A = -3x + 5x + 5$$

$$A = (-3 + 5)x + 5$$

$$A = 2x + 5$$

4. $D = -4 + 2x - 10 - 10x$

Solution:

$$A = -4 + 2x - 10 - 10x$$

$$A = 2x - 4 - 10 - 10x$$

$$A = 2x - 14 - 10x$$

$$A = 2x - 10x - 14$$

$$A = (2 - 10)x - 14$$

$$A = -8x - 14$$

5. $E = -1 - 8 + 8x + 6 - 4x$

Solution:

$$A = -1 - 8 + 8x + 6 - 4x$$

$$A = -9 + 8x + 6 - 4x$$

$$A = 8x - 9 + 6 - 4x$$

$$A = 8x - 3 - 4x$$

$$A = 8x - 4x - 3$$

$$A = (8 - 4)x - 3$$

$$A = 4x - 3$$

6. $E = x^2 + 3 + 3x + 3 - 10x$

Solution:

$$A = x^2 + 3 + 3x + 3 - 10x$$

$$A = x^2 + 3x + 3 + 3 - 10x$$

$$A = x^2 + 3x + 6 - 10x$$

$$A = x^2 + 3x - 10x + 6$$

$$A = x^2 + (3 - 10)x + 6$$

$$A = x^2 - 7x + 6$$

7. $F = -6x^2 + 9 - 2x - 2 - 6x$

Solution:

$$A = -6x^2 + 9 - 2x - 2 - 6x$$

$$A = -6x^2 - 2x + 9 - 2 - 6x$$

$$A = -6x^2 - 2x + 7 - 6x$$

$$A = -6x^2 - 2x - 6x + 7$$

$$A = -6x^2 + (-2 - 6)x + 7$$

$$A = -6x^2 - 8x + 7$$

8. $G = 3x^2 + 1x^2 - 9x - 9 + 3x$

Solution:

$$A = 3x^2 + 1x^2 - 9x - 9 + 3x$$

$$A = 3x^2 + x^2 - 9x - 9 + 3x$$

$$A = (3 + 1)x^2 - 9x - 9 + 3x$$

$$A = 4x^2 - 9x - 9 + 3x$$

$$A = 4x^2 - 9x + 3x - 9$$

$$A = 4x^2 + (-9 + 3)x - 9$$

$$A = 4x^2 - 6x - 9$$

9. $G = -2x^2 + 7 - 6x - 6x^2 - 2x$

Solution:

$$A = -2x^2 + 7 - 6x - 6x^2 - 2x$$

$$A = -2x^2 - 6x + 7 - 6x^2 - 2x$$

$$A = -2x^2 - 6x^2 - 6x + 7 - 2x$$

$$A = (-2 - 6)x^2 - 6x + 7 - 2x$$

$$A = -8x^2 - 6x + 7 - 2x$$

$$A = -8x^2 - 6x - 2x + 7$$

$$A = -8x^2 + (-6 - 2)x + 7$$

$$A = -8x^2 - 8x + 7$$