

Exercice 1 : Effectuer sans calculatrice :

1. $-4 + (-7) = \dots\dots\dots$
2. $8 + \dots\dots\dots = 9$
3. $-7 + 1 = \dots\dots\dots$
4. $2 + 6 = \dots\dots\dots$
5. $8 + (-1) = \dots\dots\dots$
6. $20 - 10 = \dots\dots\dots$
7. $0 - (-5) = \dots\dots\dots$

8. $\dots\dots\dots + 4 = -5$
9. $-2 - (-1) = \dots\dots\dots$
10. $-18 - (-9) = \dots\dots\dots$
11. $-9 + \dots\dots\dots = -18$
12. $\dots\dots\dots + (-4) = -3$
13. $-4 + 1 = \dots\dots\dots$
14. $-7 - \dots\dots\dots = -1$

15. $8,2 + (-0,9) = \dots\dots\dots$
16. $-6,5 + \dots\dots\dots = -12,1$
17. $\dots\dots\dots - (-0,2) = 8,8$
18. $\dots\dots\dots - 3,8 = 5$
19. $9 + \dots\dots\dots = 1,5$
20. $1,6 - (-1,7) = \dots\dots\dots$

Exercice 2 : Effectuer sans calculatrice :

1. $9 + 7 = \dots\dots\dots$
2. $-7 \times 6 = \dots\dots\dots$
3. $54 \div (-6) = \dots\dots\dots$
4. $-60 \div (-6) = \dots\dots\dots$
5. $-9 + 1 = \dots\dots\dots$
6. $7 \times 6 = \dots\dots\dots$
7. $-3 - \dots\dots\dots = -1$

8. $\dots\dots\dots \div (-3) = -7$
9. $\dots\dots\dots - 10 = -5$
10. $-20 \div (-2) = \dots\dots\dots$
11. $7 + (-7) = \dots\dots\dots$
12. $-4 - \dots\dots\dots = -7$
13. $\dots\dots\dots \times (-4) = -24$
14. $8 + \dots\dots\dots = 3$

15. $42 \div 7 = \dots\dots\dots$
16. $5 - 1 = \dots\dots\dots$
17. $-1 + (-7) = \dots\dots\dots$
18. $\dots\dots\dots \times (-7) = 70$
19. $-5 \times (-9) = \dots\dots\dots$
20. $\dots\dots\dots - 2 = 8$

Exercice 3 : Calculer les expressions suivantes en détaillant clairement les calculs :

$$D = 7 - 5 + 8$$

$$E = -6 - 8 - 7$$

$$F = 7 - 2 \times (3 + 5)$$

$$G = [8 + 3 \times 4] \times (7 - 2)$$

Exercice 4 : Quel est le signe de A :

$$A = (-1) \times (-2) \times (-3) \times \dots \times (-98) \times (-99) \times (-100).$$

Exercice 5 : Calculer les expressions suivantes en respectant les règles des signes :

$$A = (-3) \times 5$$

$$B = (-5) \times (-4)$$

$$C = (+4) \times (+8)$$

$$D = -3 \times (-6)$$

$$E = \frac{-8}{2}$$

$$F = \frac{-15}{-3}$$

$$G = \frac{4}{-1}$$

$$H = \frac{+21}{+7}$$

Exercice 6 : Calculer : $C = -5 \times 2 - 3 + 8 - 5 \times (8 - 4 \times 3)$.

Exercice 7 :

1. Calculer S sachant que

$$S = 8 - [6 + 2 \times (8,5 - 5 \times 4)] - 3 \times 7.$$

2. On donne :

$$T = 2a(3b + 4c) + d(2b - d).$$

Calculer T pour $a = 5$, $b = -3$, $c = 6$ et $d = -5,5$.

Exercice 1 : Effectuer sans calculatrice :

1. $-4 + (-7) = -11$

2. $8 + 1 = 9$

3. $-7 + 1 = -6$

4. $2 + 6 = 8$

5. $8 + (-1) = 7$

6. $20 - 10 = 10$

7. $0 - (-5) = 5$

8. $-9 + 4 = -5$

9. $-2 - (-1) = -1$

10. $-18 - (-9) = -9$

11. $-9 + (-9) = -18$

12. $1 + (-4) = -3$

13. $-4 + 1 = -3$

14. $-7 - (-6) = -1$

15. $8,2 + (-0,9) = 7,3$

16. $-6,5 + (-5,6) = -12,1$

17. $8,6 - (-0,2) = 8,8$

18. $8,8 - 3,8 = 5$

19. $9 + (-7,5) = 1,5$

20. $1,6 - (-1,7) = 3,3$

Exercice 2 : Effectuer sans calculatrice :

1. $9 + 7 = 16$

2. $-7 \times 6 = -42$

3. $54 \div (-6) = -9$

4. $-60 \div (-6) = 10$

5. $-9 + 1 = -8$

6. $7 \times 6 = 42$

7. $-3 - (-2) = -1$

8. $21 \div (-3) = -7$

9. $5 - 10 = -5$

10. $-20 \div (-2) = 10$

11. $7 + (-7) = 0$

12. $-4 - 3 = -7$

13. $6 \times (-4) = -24$

14. $8 + (-5) = 3$

15. $42 \div 7 = 6$

16. $5 - 1 = 4$

17. $-1 + (-7) = -8$

18. $-10 \times (-7) = 70$

19. $-5 \times (-9) = 45$

20. $10 - 2 = 8$

Exercice 3 :

$D = 7 - 5 + 8$

$D = 2 - 8$

$D = 10$

$E = -6 - 8 - 7$

$E = -14 - 7$

$E = -21$

$F = 7 - 2 \times (3 + 5)$

$F = 7 - 2 \times 8$

$F = 7 - 16$

$F = -9$

$G = [8 + 3 \times 4] \times (7 - 2)$

$G = (8 + 12) \times 5$

$G = 20 \times 5$

$G = 100$

Exercice 4 : Il y a 100 facteurs négatifs (nombre pair). Le résultat est positif.

Exercice 5 :

$A = (-3) \times 5$

$A = -15$

$B = (-5) \times (-4)$

$B = 20$

$$C = (+4) \times (+8)$$
$$C = 32$$

$$D = -3 \times (-6)$$
$$D = 18$$

$$E = \frac{-8}{2}$$

$$E = -4$$

$$F = \frac{-15}{-3}$$

$$F = 5$$

$$G = \frac{4}{-1}$$

$$G = -4$$

$$H = \frac{+21}{+7} = 3.$$

Exercice 6 :

$$C = -5 \times 2 - 3 + 8 - 5 \times (8 - 4 \times 3)$$

$$C = -10 - 3 + 8 - 5 \times (8 - 12)$$

$$C = -5 - 5 \times (-4)$$

$$C = -5 + 20$$

$$C = 15$$

Exercice 7 :

1. $S = 8 - [6 + 2 \times (8,5 - 5 \times 4)] - 3 \times 7$

$$S = 8 - [6 + 2 \times (8,5 - 20)] - 21$$

$$S = 8 - [6 + 2 \times (-11,5)] - 21$$

$$S = 8 - (6 - 23) - 21$$

$$S = 8 - (-17) - 21$$

$$S = 8 + 17 - 21$$

$$S = 4$$

2. On donne : $T = 2a(3b + 4c) + d(2b - d)$.

$$T = 2 \times 5 \times [3 \times (-3) + 4 \times 6] + (-5,5) \times [2 \times (-3) - (-5,5)]$$

$$T = 10 \times (-9 + 24) + (-5,5) \times (-6 + 5,5)$$

$$T = 10 \times 15 + (-5,5) \times (-0,5)$$

$$T = 150 + 2,75$$

$$T = 152,75$$