

FEUILLE DE RÉVISIONS N° 7

Chapitre n° 7 (p. 69-70 du TD)

Exercice 1

$$A = 3 + 4 \times 5 = 3 + 20 = 23.$$

$$B = 13 - 2 \times 6 + 9 = 13 - 12 + 9 = 1 + 9 = 10.$$

$$C = 2 \times (5 + 7 \times 2) = 2 \times (5 + 14) = 2 \times 19 = 38.$$

$$D = 3 \times 5 + 12 \div 4 = 15 + 12 \div 4 = 15 + 3 = 18.$$

Exercice 2

$$E = 3x = 3 \times 5 = 15.$$

$$F = x - 3 = 12 - 3 = 9.$$

$$G = 2x - 6 = 2 \times x - 6 = 2 \times 7 - 6 = 14 - 6 = 8.$$

$$H = 2x^2 + 3x - 1 = 2 \times x^2 + 3 \times x - 1 = 2 \times 5^2 + 3 \times 5 - 1 = 2 \times 25 + 3 \times 5 - 1 = 50 + 15 - 1 = 64.$$

Exercice 3

1. D : ABC est un triangle.

P : La somme des mesures des angles d'un triangle vaut 180° .

$$C : \widehat{ABC} = 180^\circ - (83^\circ + 47^\circ) = 180^\circ - 130^\circ = 50^\circ.$$

2. D : KBG est un triangle.

P : La somme des mesures des angles d'un triangle vaut 180° .

$$C : \widehat{KBG} = 180^\circ - (29^\circ + 52^\circ) = 180^\circ - 81^\circ = 99^\circ.$$

Exercice 4

$A(4; 1)$; $B(-1; -2)$; $C(2; -1)$; $D(4; 5)$; $E(-1; 3)$; $F(-4; 1)$; $G(0; 2)$; $H(5; -3)$; $I(-2; 0)$ et $J(-3; -4)$.

Exercice 5

$$\frac{4}{3} = \frac{4 \times 6}{3 \times 6} = \frac{24}{18}$$

$$\frac{5}{6} = \frac{5 \times 3}{6 \times 3} = \frac{15}{18}$$

$$\frac{6}{10} = \frac{6 \times 3}{10 \times 3} = \frac{18}{30}$$

$$\frac{2}{3} = \frac{2 \times 10}{3 \times 10} = \frac{20}{30}$$

$$\frac{3}{7} = \frac{3 \times 5}{7 \times 5} = \frac{15}{35}$$

$$\frac{4}{5} = \frac{4 \times 7}{5 \times 7} = \frac{28}{35}$$

Exercice 6

$$A = 3 \times a \times b = 3ab.$$

$$B = 3 \times a - 4 \times b = 3a - 4b.$$

$$C = 1 \times a + a \times a = a + a^2.$$

$$D = a \times a \times a - 0 \times b = a^3.$$

$$E = (8 \times a + 3) \times (2 + a) = (8a + 3)(2 + a).$$

$$F = 2 \times \pi \times \pi \times 7 - 1 = 14\pi^2 - 1.$$

$$G = 8 \times a \times b \times 2 = 16ab.$$

$$H = a \times a \times 3 = 3a^2.$$

Exercise 7

1. $\mathcal{A}_{ABCD} = c \times c = 3 \times 3 = 9 \text{ cm}^2$.

2. $\mathcal{A}_{ABC} = \frac{L \times l}{2} = \frac{12 \times 5}{2} = \frac{60}{2} = 30 \text{ cm}^2$.

3. $\mathcal{A}_{ABCD} = L \times l = 5 \times 3 = 15 \text{ cm}^2$.

4. $\mathcal{A}_{\text{disque}} = \pi \times r \times r = \pi \times 3 \times 3 = 9\pi \approx 28,274 \text{ cm}^2$.

Exercise 8

$A(1,5 ; 2)$

$B(2 ; -2)$

$C(0,75 ; 5)$

$D(-1,25 ; -4)$

$E(-1,75 ; 6)$

$F(1,25 ; -3)$

$G(-1 ; -6)$

$H(2 ; -5)$

