Correction de la fiche 6

Exercice 1 :

$3h\,36\,min = 3,6\,h$

$36\,min = \dfrac{36}{60}\,h = \dfrac{6\times 6}{6\times 10}\,h = \dfrac{6}{10}\,h = 0,6\,h$

$4h\,12\,min = 4,2\,h$

$12\,min = \dfrac{12}{60}\,h = \dfrac{6\times 2}{6\times 10}\,h = \dfrac{2}{10}\,h = 0,2\,h$

$30\,min = 0,5\,h$

$30\,min = \dfrac{30}{60}\,h = \dfrac{1}{2}\,h = 0,5\,h$

$15\,min = 0,25\,h$

$15\,min = \dfrac{15}{60}\,h = \dfrac{15\times 1}{15\times 4}\,h = \dfrac{1}{4}\,h = 0,25\,h$

$10h\,54\,min = 10,9\,h$

$54\,min = \dfrac{54}{60}\,h = \dfrac{6\times 9}{6\times 10}\,h = \dfrac{9}{10}\,h = 0,9\,h$

$1h\,48\,min = 1,8\,h$

$48\,min = \dfrac{48}{60}\,h = \dfrac{6\times 8}{6\times 10}\,h = \dfrac{8}{10}\,h = 0,8\,h$

Exercice 2 :

$2h\,6\,min = 2,1\,h$

$6\,min = \dfrac{6}{60}\,h = \dfrac{1}{10}\,h = 0,1\,h$

$1h\,45\,min = 1,75\,h$

$45\,min = \dfrac{45}{60}\,h = \dfrac{15\times 3}{15\times 4}\,h = \dfrac{3}{4}\,h = 0,75\,h$

$24\,min = 0,4\,h$

$24\,min = \dfrac{24}{60}\,h = \dfrac{6\times 4}{6\times 10}\,h = \dfrac{4}{10}\,h = 0,4\,h$

$5h\,18\,min = 5,3\,h$

$18\,min = \dfrac{18}{60}\,h = \dfrac{6\times 3}{6\times 10}\,h = \dfrac{3}{10}\,h = 0,3\,h$

$6h\,42\,min = 6,7\,h$

$42\,min = \dfrac{42}{60}\,h = \dfrac{6\times 7}{6\times 10}\,h = \dfrac{7}{10}\,h = 0,7\,h$

$1h\,33\,min = 1,55\,h$

$33\,min = \dfrac{33}{60}\,h = \dfrac{3\times 11}{3\times 20}\,h = \dfrac{11}{20}\,h = 0,55\,h$

Exercice 3 :

$2,5\,h = 2h\,30\,min$

$0,5\times 60 = 5\times 6 = 30$

$4,7\,h = 4h\,42\,min$

$0,7\times 60 = 7\times 6 = 42$

$1,3\,h = 1h\,18\,min$

$0,3\times 60 = 3\times 6 = 18$

$0,6\,h = 36\,min$

$0,6\times 60 = 6\times 6 = 36$

$1,34\,h = 1h\,20\,min\,24\,s$

$0,34\times 60 = 3,4\times 6 = 20,4$ et $0,4\times 60 = 24$

$8,25\,h = 8h\,15\,min$

$0,25\times 60 = 2,5\times 6 = 15$

Exercice 4 :

0,75h = 45 min   0,75 × 60 = 7,5 × 6 = 45

9,1h = 9h 6 min   0,1 × 60 = 1 × 6 = 6

5,4h = 5h 24 min   0,4 × 60 = 4 × 6 = 24

4,9h = 4h 54 min   0,9 × 60 = 9 × 6 = 54

8,2h = 8h 12 min   0,2 × 60 = 2 × 6 = 12

7,8h = 7h 48 min   0,8 × 60 = 8 × 6 = 48

Exercice 5 :

1.   9h 23 min ⟶ 12h 41 min

3h 18min   Le train a roulé 3h 18 min.

2.   16h 08 min ⟶ 21h 54 min

5h 46 min   Le train a roulé 5h 46 min.

3.   11h 42 min ⟶ 15h 25 min

18min ↘ ↗ 3h 25 min
     12ʰ

18 min + 3h 25 min = 3h 43 min   Le train a roulé
                                  3h 43 min.

Exercice 6 :

1.   19h 45 min ⟶ 23h 12 min

15min ↘ ↗ 3h 12 min
     20h

15 min + 3h 12 min = 3h 27 min   Le train a roulé 3h 27 min.

2.   23h 37 min ⟶ 2h 15 min

23min ↘ ↗ 2h 15 min
     00h

23 min + 2h 15 min = 2h 38 min   Le train a roulé
                                  2h 38 min.

Exercice 7 :

kg	hg	dag	g	dg	cg	mg

Exercice 8 :

$15 \text{ mg} = 0,000\,015 \text{ kg}$ $2,3 \text{ kg} = 2300 \text{ g}$

$5 \text{ dag} = 500 \text{ dg}$ $12,4 \text{ dg} = 1,24 \text{ g}$

$5,01 \text{ g} = 0,0501 \text{ hg}$ $30,1 \text{ g} = 30\,100 \text{ mg}$

Exercice 9 :

$3,2 \text{ t} = 3200 \text{ kg}$ $124 \text{ µg} = 0,000\,124 \text{ g}$

$0,7 \text{ hg} = 70\,000 \text{ mg}$ $5 \text{ mg} = 0,005 \text{ g}$

$2,7 \text{ q} = 270\,000 \text{ g}$ $7 \text{ g} = 0,007 \text{ kg}$

Exercice 10 :

km	hm	dam	m	dm	cm	mm

Exercice 11 :

1. $45,6 \text{ m} = 45\,600 \text{ mm} = 4,56 \text{ dam}$

2. $85,55 \text{ km} = 855,5 \text{ hm} = 85\,550 \text{ m}$

3. $12,5 \text{ cm} = 125 \text{ mm} = 0,125 \text{ m}$

4. $0,789 \text{ km} = 789 \text{ m} = 78900 \text{ cm}$

5. $32,1 \text{ km} = 3\,210\,000 \text{ cm}$

6. $762\,000 \text{ cm} = 7,62 \text{ km}$

Exercice 12 :

km²	hm²	dam²	m²	dm²	cm²	mm²

3/4

Exercice 13 :

1. $52 \text{ cm}^2 = 5\,200 \text{ mm}^2$ 2. $2 \text{ dam}^2 = 200 \text{ m}^2$

3. $123 \text{ mm}^2 = 0,0123 \text{ dm}^2$ 4. $1203 \text{ cm}^2 = 0,1203 \text{ m}^2$

5. $53 \text{ m}^2 = 0,0053 \text{ hm}^2$ 6. $74 \text{ dm}^2 = 740\,000 \text{ mm}^2$

Exercice 14 :

m³			dm³			cm³			mm³		
						L	dL	cL	mL		

Exercice 15 :

1. $230 \text{ dm}^3 = 0,23 \text{ m}^3$ 2. $0,00075 \text{ dm}^3 = 750 \text{ mm}^3$

3. $0,9 \text{ km}^3 = 900\,000 \text{ dam}^3$ 4. $0,1 \text{ cm}^3 = 100 \text{ mm}^3$

5. $350 \text{ L} = 0,35 \text{ m}^3$ 6. $50 \text{ mm}^3 = 0,000\,05 \text{ L}$

7. $3,601 \text{ dm}^3 = 360,1 \text{ cL}$

Exercice 16 :

1. $51 \text{ cm} = 0,000\,51 \text{ m}$ 2. $2450 \text{ cL} = 24,5 \text{ dm}^3$

3. $574,3 \text{ dm}^2 = 5,743 \text{ m}^2$ 4. $0,4 \text{ dm}^3 = 400\,000 \text{ mm}^3$

5. $293,7 \text{ km} = 2\,937\,000 \text{ dm}$ 6. $0,92 \text{ L} = 920 \text{ mL}$

7. $71,3 \text{ mm}^2 = 0,000\,0713 \text{ m}^2$