Correction of exercise 1

Convert these metric measurements to the units indicated at the right-hand side :

▶**1.** 80,7 dm=0,080 7 hm

km	hm	dam	m	dm	cm	mm
0	0,	0	8	0	7	0

▶**2.** 59,2 dag=5 920 dg

kg	hg	dag	g	dg	cg	mg
0	5	9	2	0,	0	0

▶**3.** 43,2 L=4 320 cL

hL	daL	L	dL	cL	mL
0	4	3	2	0,	0

▶**4.** 97,4 hg=9 740 000 mg

kg	hg	dag	g	dg	cg	mg
9	7	4	0	0	0	0,

▶**5.** 6,54 m=654 cm

km	hm	dam	m	dm	cm	mm
0	0	0	6	5	4,	0

▶**6.** 41,6 cm=0,416 m

km	hm	dam	m	dm	cm	mm
0	0	0	0,	4	1	6

▶**7.** 53,2 hL=53 200 dL

hL	daL	L	dL	cL	mL
53	2	0	0,	0	0

▶**8.** 29,8 hL=29 800 dL

hL	daL	L	dL	cL	mL
29	8	0	0,	0	0

▶**9.** 75,5 dam=7,55 hm

km	hm	dam	m	dm	cm	mm
0	7,	5	5	0	0	0

▶**10.** 8,34 hg=0,834 kg

kg	hg	dag	g	dg	cg	mg
0,	8	3	4	0	0	0

▶**11.** 1,51 dL=0,151 L

hL	daL	L	dL	cL	mL
0	0	0,	1	5	1

▶**12.** 56,3 dm=5 630 mm

km	hm	dam	m	dm	cm	mm
0	0	0	5	6	3	0,

▶**13.** 88,2 dam=0,882 km

km	hm	dam	m	dm	cm	mm
0,	8	8	2	0	0	0

▶**14.** 29,9 hg=2 990 000 mg

kg	hg	dag	g	dg	cg	mg
2	9	9	0	0	0	0,

▶**15.** 73,2 dg=0,007 32 kg

kg	hg	dag	g	dg	cg	mg
0,	0	0	7	3	2	0

▶**16.** 1,89 dam=0,189 hm

km	hm	dam	m	dm	cm	mm
0	0,	1	8	9	0	0

▶**17.** 26,3 L=2 630 cL

hL	daL	L	dL	cL	mL
0	2	6	3	0,	0

▶**18.** 6 g=0,6 dag

kg	hg	dag	g	dg	cg	mg
0	0	0,	6	0	0	0

▶**19.** 42 dag=420 000 mg

kg	hg	dag	g	dg	cg	mg
0	4	2	0	0	0	0,

▶**20.** 43,8 hm=4 380 m

km	hm	dam	m	dm	cm	mm
4	3	8	0,	0	0	0

▶**21.** 59,7 daL=597 L

hL	daL	L	dL	cL	mL
5	9	7,	0	0	0

▶**22.** 7,17 hg=717 g

kg	hg	dag	g	dg	cg	mg
0	7	1	7,	0	0	0

▶**23.** 14,3 hg=143 000 cg

kg	hg	dag	g	dg	cg	mg
1	4	3	0	0	0,	0

▶**24.** 80,1 cL=0,080 1 daL

hL	daL	L	dL	cL	mL
0	0,	0	8	0	1

▶**25.** 5,74 dam=0,574 hm

km	hm	dam	m	dm	cm	mm
0	0,	5	7	4	0	0

▶**26.** 3,53 g=353 cg

kg	hg	dag	g	dg	cg	mg
0	0	0	3	5	3,	0

▶**27.** 6,93 g=69,3 dg

kg	hg	dag	g	dg	cg	mg
0	0	0	6	9,	3	0

▶**28.** 8,82 km=882 000 cm

km	hm	dam	m	dm	cm	mm
8	8	2	0	0	0,	0

▶**29.** 43,4 cg=0,434 g

kg	hg	dag	g	dg	cg	mg
0	0	0	0,	4	3	4

▶**30.** 4,46 kg=4 460 000 mg

kg	hg	dag	g	dg	cg	mg
4	4	6	0	0	0	0,

▶**31.** $6{,}67\,\text{dam}^3 = 6\,670\,000\,\text{dm}^3$

▶**32.** $9{,}04\,\text{dam}^3 = 9\,040\,\text{m}^3$

▶**33.** $31{,}4\,\text{m}^3 = 31\,400\,\text{dm}^3$

▶**34.** $54{,}6\,\text{km}^3 = 54\,600\,000\,\text{dam}^3$

▶**35.** $7{,}67\,\text{dam}^3 = 7\,670\,\text{m}^3$

▶**36.** $86{,}5\,\text{hm}^3 = 86\,500\,000\,\text{m}^3$

km^3			hm^3			dam^3			m^3			dm^3			cm^3			mm^3		
								6	6	7	0	0	0	0,						
								9	0	4	0,									
										3	1	4	0	0,						
	5	4	6	0	0	0	0	0,												
								7	6	7	0,									
				8	6	5	0	0	0	0	0,									

▶**37.** $1{,}56\,\text{hm}^3 = 1\,560\,\text{dam}^3$

▶**38.** $80{,}5\,\text{dam}^3 = 0{,}080\,5\,\text{hm}^3$

▶**39.** $65{,}6\,\text{m}^3 = 65\,600\,\text{dm}^3$

▶**40.** $97{,}1\,\text{m}^3 = 0{,}000\,097\,1\,\text{hm}^3$

▶**41.** $83{,}1\,\text{hm}^3 = 83\,100\,000\,\text{m}^3$

▶**42.** $8{,}31\,\text{dm}^3 = 0{,}000\,008\,31\,\text{dam}^3$

km^3			hm^3			dam^3			m^3			dm^3			cm^3			mm^3		
					1	5	6	0,												
					0,	0	8	0	5											
										6	5	6	0	0,						
					0,	0	0	0	0	9	7	1								
				8	3	1	0	0	0	0	0,									
								0,	0	0	0	0	0	8	3	1				

▶**43.** $35{,}6\,\text{cm}^3 = 0{,}000\,035\,6\,\text{m}^3$

▶**44.** $7{,}53\,\text{cm}^3 = 0{,}000\,007\,53\,\text{m}^3$

▶**45.** $9{,}85\,\text{dm}^3 = 0{,}000\,009\,85\,\text{dam}^3$

▶**46.** $3{,}24\,\text{cm}^3 = 3\,240\,\text{mm}^3$

▶**47.** $56{,}4\,\text{dm}^3 = 56\,400\,000\,\text{mm}^3$

▶**48.** $67{,}7\,\text{dm}^3 = 0{,}067\,7\,\text{m}^3$

km^3			hm^3			dam^3			m^3			dm^3			cm^3			mm^3		
											0,	0	0	0	0	3	5	6		
											0,	0	0	0	0	0	7	5	3
								0,	0	0	0	0	0	9	8	5				
																3	2	4	0,
												5	6	4	0	0	0	0	0,
											0,	0	6	7	7					

▶**49.** $90{,}3\,\text{dam}^3 = 90\,300\,\text{m}^3$

▶**50.** $83{,}2\,\text{hm}^3 = 83\,200\,\text{dam}^3$

▶**51.** $56{,}3\,\text{m}^3 = 0{,}056\,3\,\text{dam}^3$

▶**52.** $56{,}5\,\text{m}^3 = 0{,}000\,056\,5\,\text{hm}^3$

▶**53.** $7{,}93\,\text{dam}^3 = 0{,}000\,007\,93\,\text{km}^3$

▶**54.** $41{,}9\,\text{dm}^3 = 0{,}041\,9\,\text{m}^3$

km^3			hm^3			dam^3			m^3			dm^3			cm^3			mm^3		
							9	0	3	0	0,									
				8	3	2	0	0,												
								0,	0	5	6	3								
					0,	0	0	0	0	5	6	5								
		0,	0	0	0	0	0	7	9	3										
											0,	0	4	1	9					

►**55.** $21{,}1\,\mathrm{hm}^3 = 21\,100\,\mathrm{dam}^3$

►**56.** $6{,}27\,\mathrm{hm}^3 = 0{,}006\,27\,\mathrm{km}^3$

►**57.** $1{,}99\,\mathrm{dm}^3 = 0{,}001\,99\,\mathrm{m}^3$

►**58.** $41{,}2\,\mathrm{m}^3 = 41\,200\,000\,\mathrm{cm}^3$

►**59.** $12\,\mathrm{cm}^3 = 0{,}012\,\mathrm{dm}^3$

►**60.** $1{,}3\,\mathrm{dm}^3 = 0{,}000\,001\,3\,\mathrm{dam}^3$

km^3	hm^3	dam^3	m^3	dm^3	cm^3	mm^3
	2 1	1 0 0,				
0,	0 0 6	2 7				
			0,	0 0 1	9 9	
			4 1 2	0 0 0	0 0 0,	
				0,	0 1 2	
		0,	0 0 0	0 0 1	3	

Correction of exercise 2

Calculate the area of each shape (by using the area unit given in the figure) :

unité d'aire
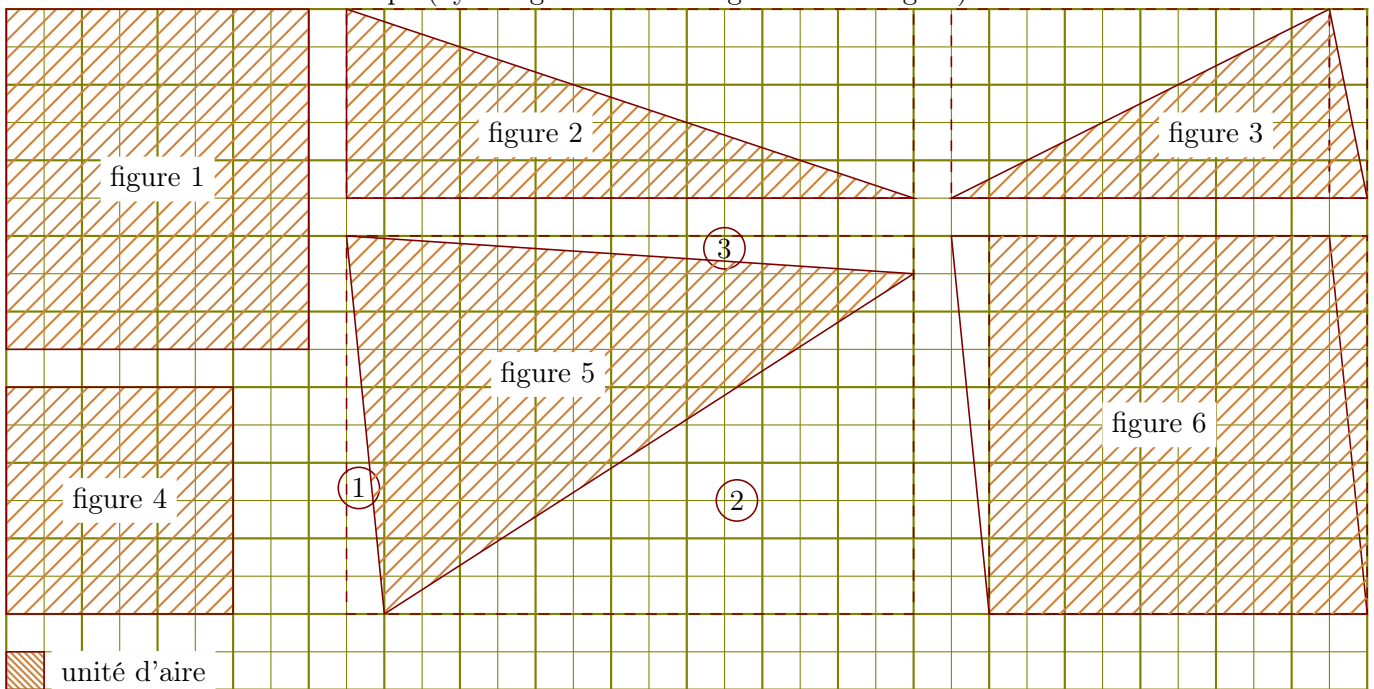
►**1.** Area of figure 1 : $8 \times 9 = 72$ area units

►**2.** Area of figure 2 : it is half of the area of the dotted rectangle.
$(15 \times 5) \div 2 = 37{,}5$ area units

►**3.** Area of figure 3 : it is half of the area of the dotted rectangle.
$(11 \times 5) \div 2 = 27{,}5$ area units

►**4.** Area of figure 4 : $6 \times 6 = 36$ area units

►**5.** Area of figure 5 : we calculate the area of the dotted rectangle and we subtract the area of the triangles ①, ② et ③.
$(15 \times 10) - (1 \times 10) \div 2 - (14 \times 9) \div 2 - (15 \times 1) \div 2 = 74{,}5$ area units

►**6.** Area of figure 6 : it is the area of the dotted rectangle.
$10 \times 10 = 100$ area units

Correction of exercise 3

Calculate the area of each shape (by using the area unit given in the figure) :
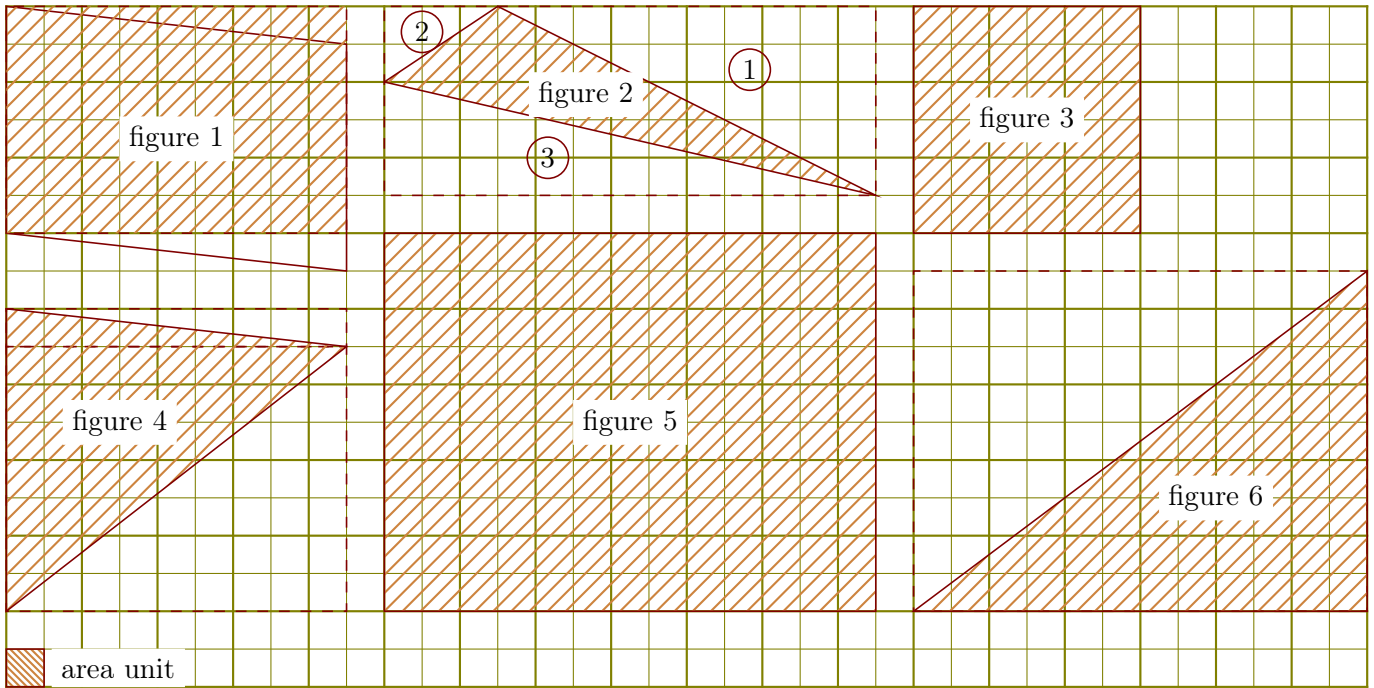
▶**1.** Area of figure 1 : it is the area of the dotted rectangle.

$9 \times 6 = 54$ area units

▶**2.** Area of figure 2 : we calculate the area in the dotted rectangle and we subtract the area of the triangles
(1), (2) et (3).

$(13 \times 5) - (10 \times 5) \div 2 - (3 \times 2) \div 2 - (13 \times 3) \div 2 = 17{,}5$ area units

▶**3.** Area of figure 3 : $6 \times 6 = 36$ area units

▶**4.** Area of figure 4 : it is half of the area of the dotted rectangle.

$(9 \times 8) \div 2 = 36$ area units

▶**5.** Area of figure 5 : $13 \times 10 = 130$ area units

▶**6.** Area of figure 6 : it is half of the area of the dotted rectangle.

$(12 \times 9) \div 2 = 54$ area units

Correction of exercise 4

Calculate the area of each shape (by using the area unit given in the figure) :
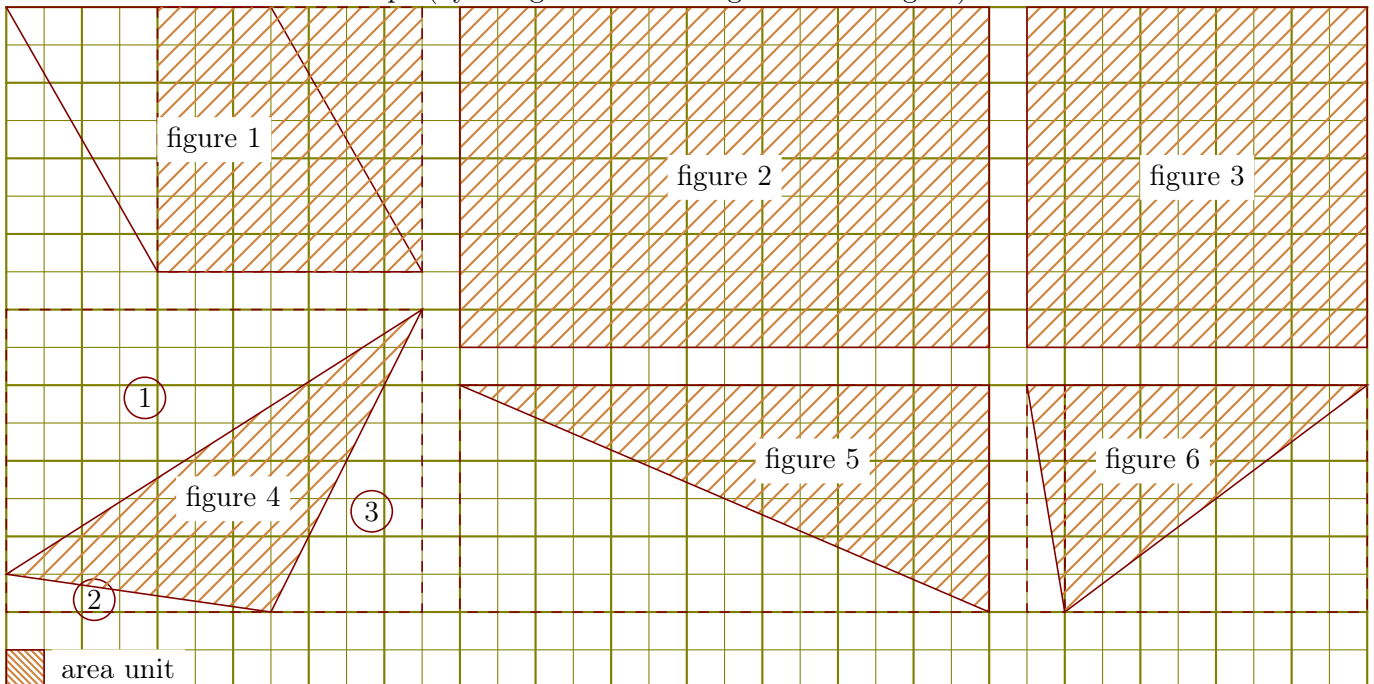
►**1.** Area of figure 1 : it is the area of the dotted triangle.

$7 \times 7 = 49$ area units

►**2.** Area of figure 2 : $14 \times 9 = 126$ area units

►**3.** Area of figure 3 : $9 \times 9 = 81$ area units

►**4.** Area of figure 4 : we calculate the area of the dotted rectangle and we subtract the areas of the triangles ①, ② et ③.

$(11 \times 8) - (11 \times 7) \div 2 - (7 \times 1) \div 2 - (4 \times 8) \div 2 = 30$ unités d'aire

►**5.** Area of figure 5 : it is the half of the dotted rectangle.

$(14 \times 6) \div 2 = 42$ area units

►**6.** Area of figure 6 : it is half of the dotted rectangle.

$(9 \times 6) \div 2 = 27$ area units

Correction of exercise 5

Calculate the area of each shape (by using the area unit given in the figure) :
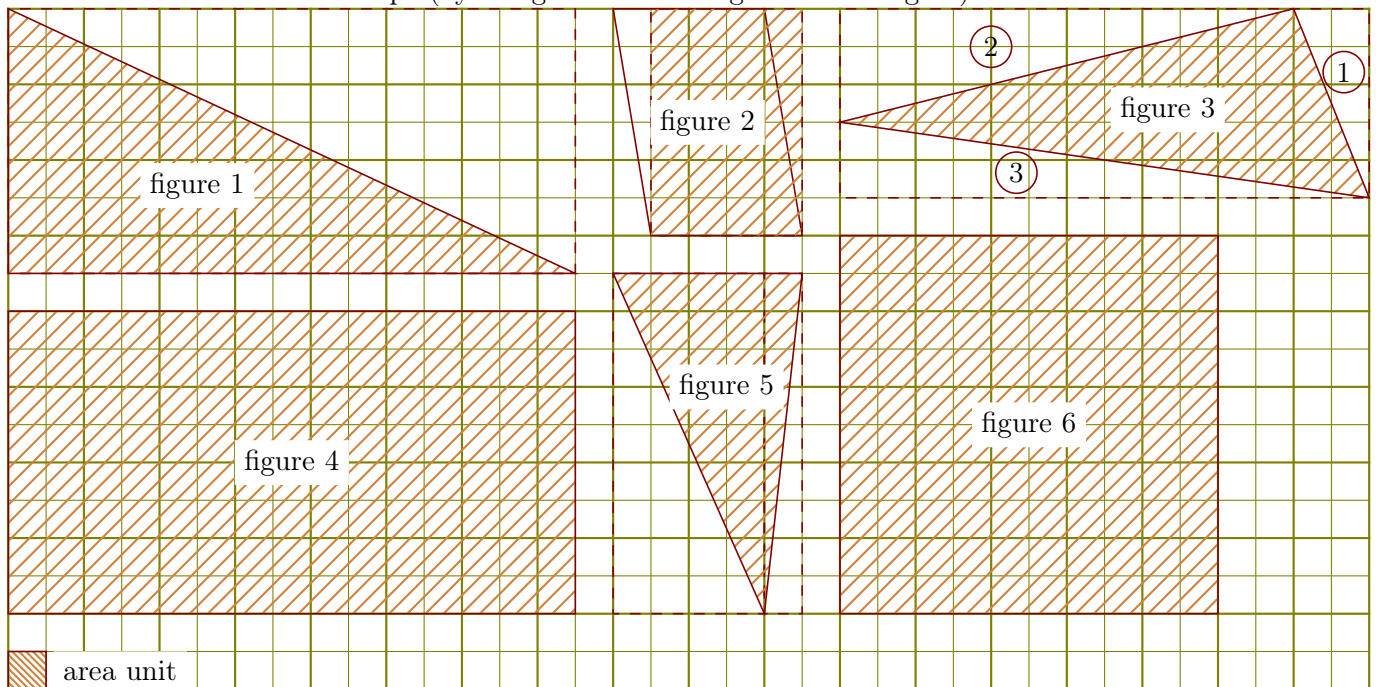
►**1.** Area of figure 1 : it is half of the area of the dotted rectangle.

$(15 \times 7) \div 2 = 52{,}5$ area units

►**2.** Area of figure 2 : it is the area of the dotted rectangle.

$4 \times 6 = 24$ area units

►**3.** Area of figure 3 : we calculate the area of the dotted rectangle and we subtract the areas of the triangles ①, ② et ③.

$(14 \times 5) - (2 \times 5) \div 2 - (12 \times 3) \div 2 - (14 \times 2) \div 2 = 33$ area units

►**4.** Area of figure 4 : $15 \times 8 = 120$ area units

►**5.** Area of figure 5 : it is the half of the area of the dotted rectangle.

$(5 \times 9) \div 2 = 22{,}5$ area units

►**6.** Area of figure 6 : $10 \times 10 = 100$ area units

Correction of exercise 6

Calculate the area of each shape (by using the area unit given in the figure) :
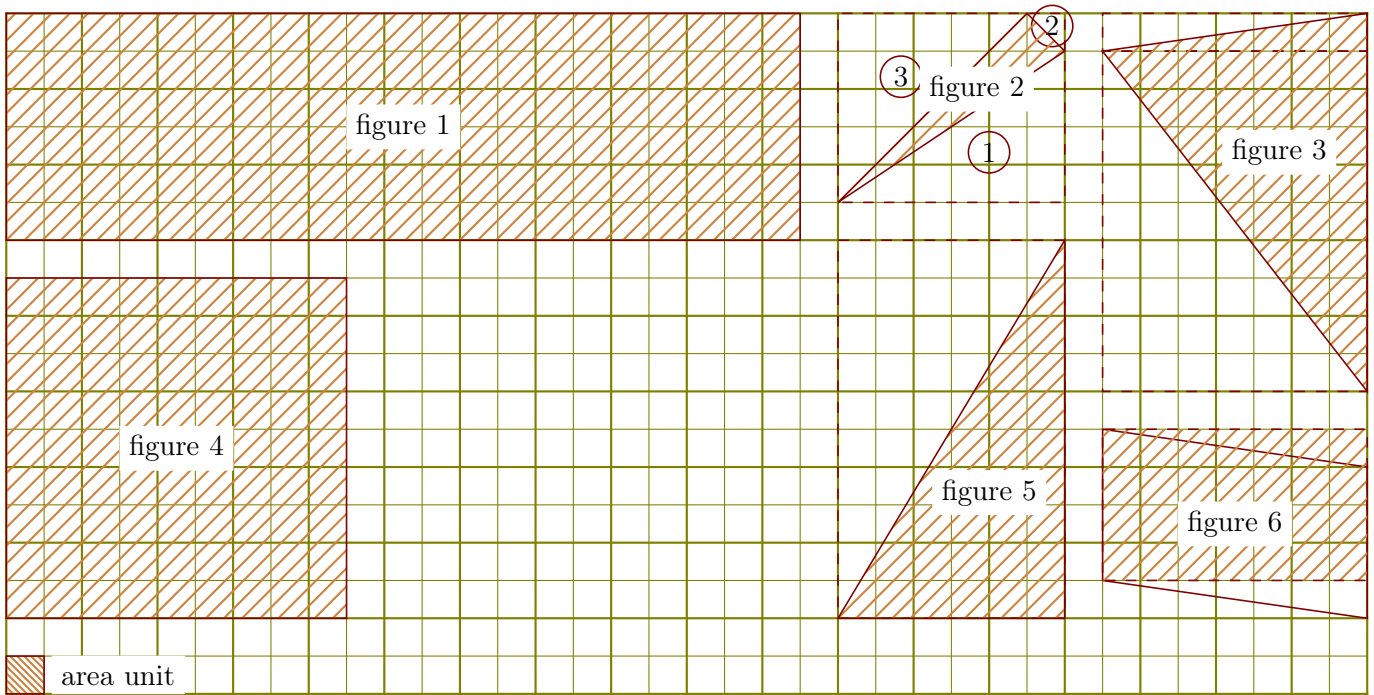
area unit

- ▶**1.** Area of figure 1 : $21 \times 6 = 126$ area units
- ▶**2.** Area of figure 2 : we calculate the area of the dotted rectangle and we subtract the areas of triangles ①, ② et ③.
  $(6 \times 5) - (6 \times 4) \div 2 - (1 \times 1) \div 2 - (5 \times 5) \div 2 = 5$ area units
- ▶**3.** Area of figure 3 : it is half of the dotted rectangle.
  $(7 \times 10) \div 2 = 35$ area units
- ▶**4.** Area of figure 4 : $9 \times 9 = 81$ area units
- ▶**5.** Area of figure 5 : it is half of the area of the dotted rectangle.
  $(6 \times 10) \div 2 = 30$ area units
- ▶**6.** Area of figure 6 : it is the area of the dotted rectangle.
  $7 \times 4 = 28$ area units

Correction of exercise 7

Figures 1 and 2 represent the same cube EFHKLUVX.
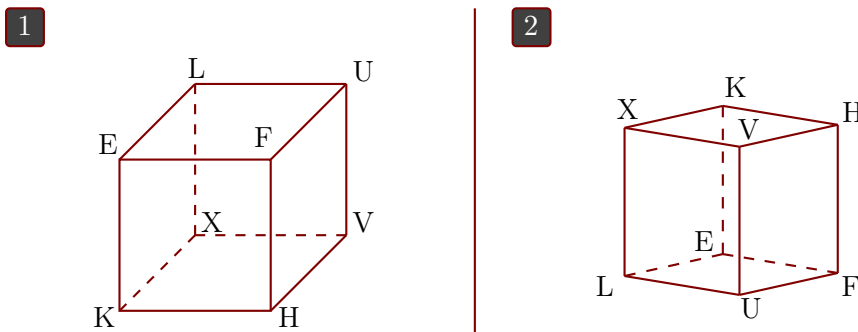
- ▶**1.** Complete the missing angles in figure 2.
- ▶**2.** Give all the perpendicular edges to [KE].
  [KH], [KX], [EF] and [EL] are the perpendicular edges to [KE].
- ▶**3.** Give all the parallel edges to [HV].
  [KX], [EL] and [FU] are the parallel edges to [HV].

Correction of exercise 8

Figures 1 and 2 represent the same cube FRSTVWXZ.

▶ **1.** Complete the missing corners in Figure 2.
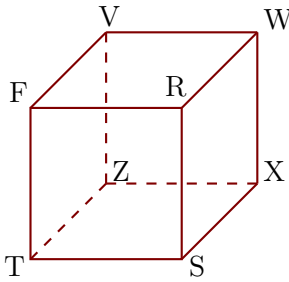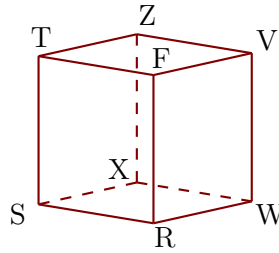
▶ **2.** Give all the perpendicular edges to [XW].

[XZ], [XS], [WV] and [WR] are the perpendicular edges to [XW].

▶ **3.** Give all the parallel edges to [XS].

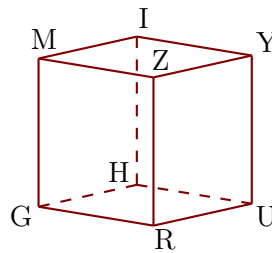[TZ], [FV] and [RW] are the parallel edges to [XS].

Correction of exercise 9
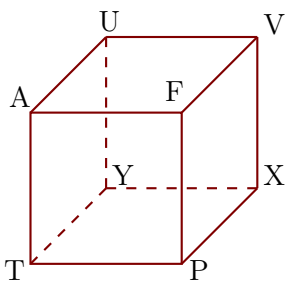
Figures 1 and 2 represent the same cube GHIMRUYZ.

▶ **1.** Complete the missing corners in Figure 2.
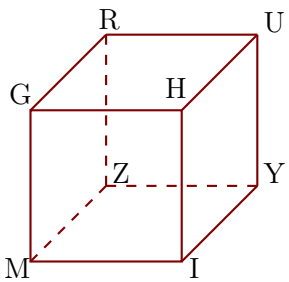
▶ **2.** Give all the perpendicular edges to [YZ].

[YU], [YI], [ZR] and [ZM] are the perpendicular edges of [YZ].

▶ **3.** Give all the parallel edges to[RG].

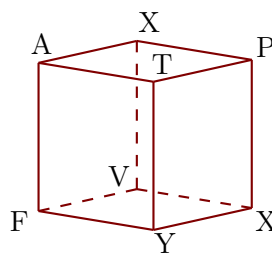[HU], [IY] and [MZ] are the parallel edges to [RG].

Correction of exercise 10

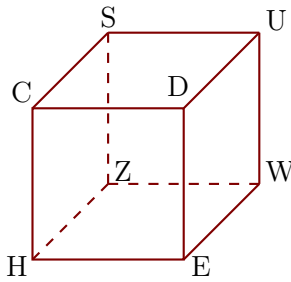Figures 1 and 2 represent the same cube AFPTUVXY.

►**1.** Complete the missing edges in Figure 2.

►**2.** Give all the perpendicular edges to [VF].

[VU], [VX], [FA] and [FP] are the perpendicular edges to [VF].

►**3.** Give all the parallel edges to [PX].
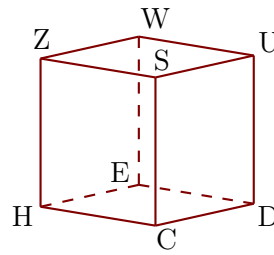
[TY], [AU] and [FV] are the parallel edges to [PX].

Correction of exercise 11

Figures 1 and 2 represent the same cube CDEHSUWZ.

►**1.** Complete the missing edges in Figure 2.

►**2.** Give all the perpendicular edges to [HZ].

[HE], [HC], [ZW] and [ZS] are the perpendicular edges to [HZ].

►**3.** Give all the parallel edges to [ZW].

[HE], [CD] and [SU] are the parallel edges to [ZW].