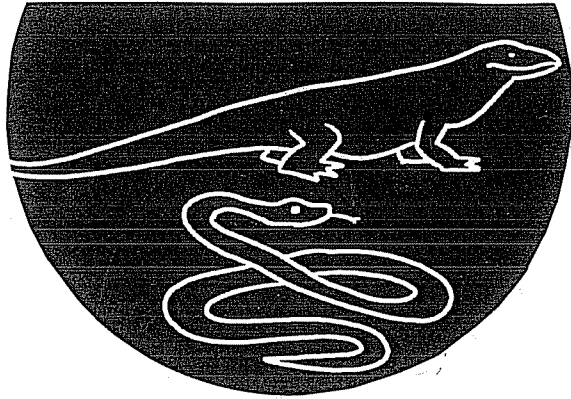


leerling:
groep:

maatwerk geel



onderdeel 2

woestijn

blok 7

bruine slang

introductie van het begrip 'oppervlakte' en

werkbladen

computerprogramma

2 woestijn

7 introduc 75 t/m 92

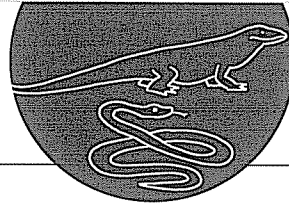
bruine slang

2.7a: oppervlakte en aantal tegels berekenen

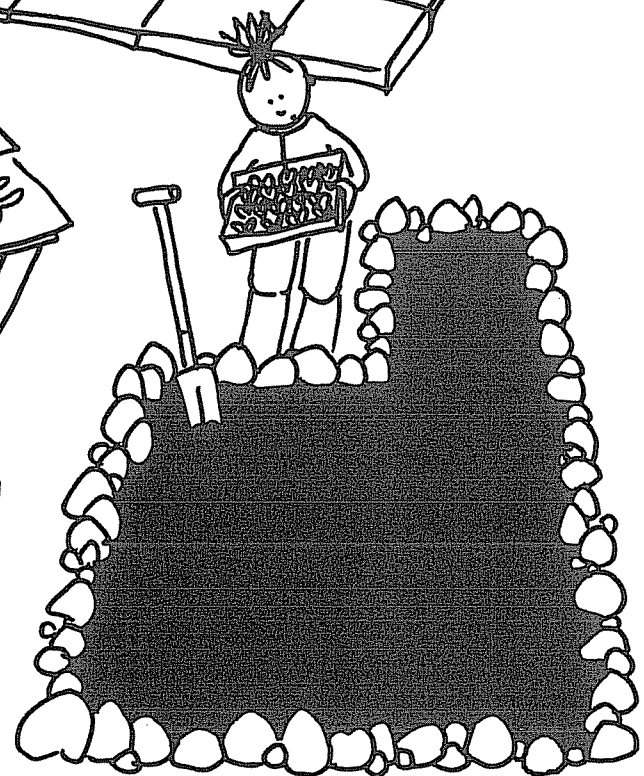
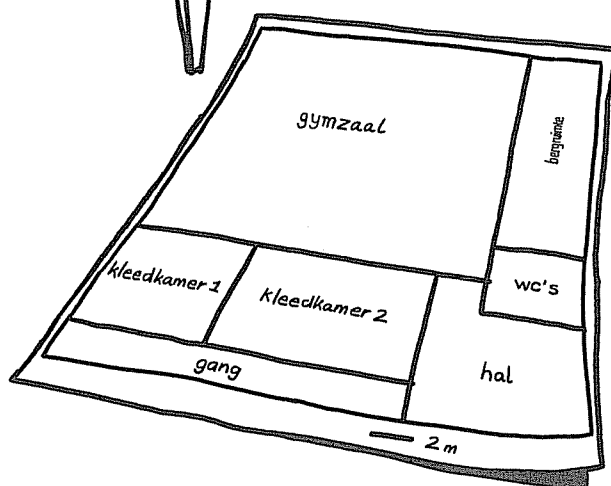
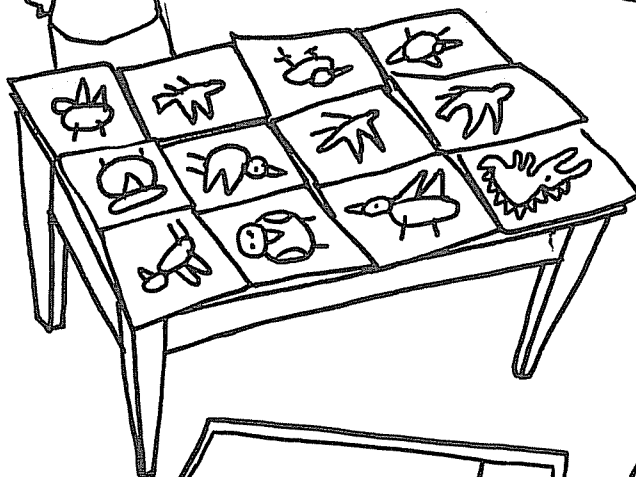
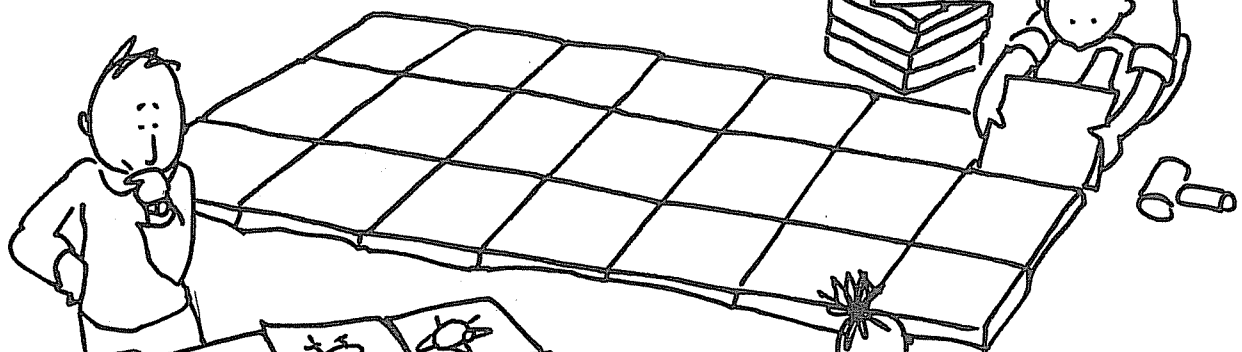
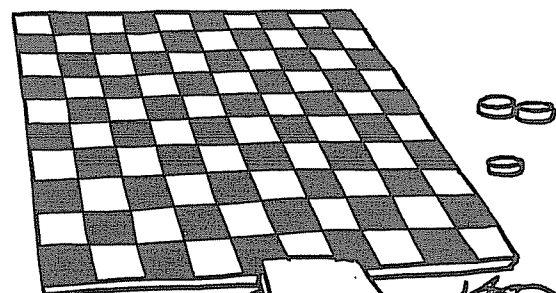
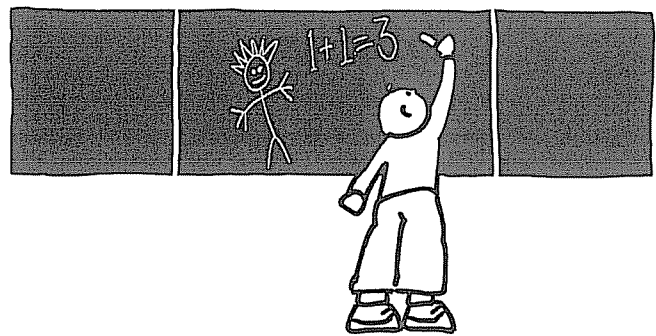
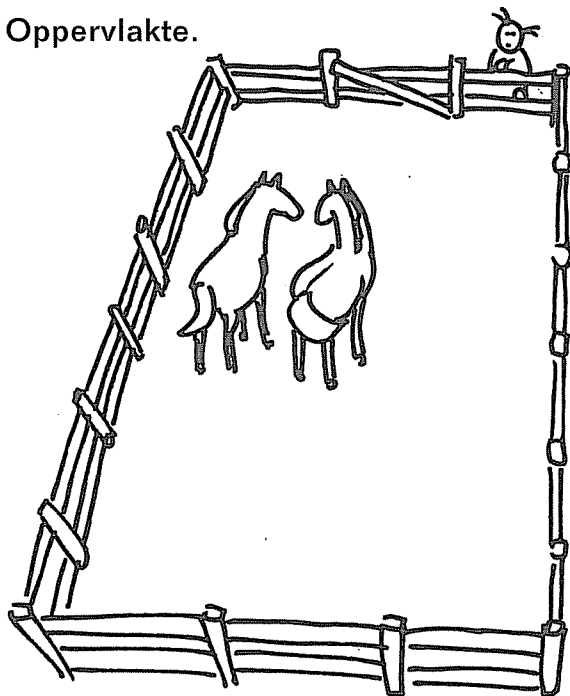
2 woestijn

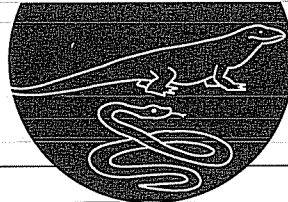
aanleren van de oppervlakte van

2.7b: de juiste oppervlakte kiezen



Oppervlakte.





1 Hoeveel is het?

$\frac{1}{2}$ deel van 1 km is m.

$\frac{1}{4}$ deel van 1 km is m.

$\frac{3}{4}$ deel van 1 km is m.

$\frac{1}{5}$ deel van 1 km is m.

$\frac{3}{5}$ deel van 1 km is m.

$\frac{1}{2}$ deel van 2 km is m.

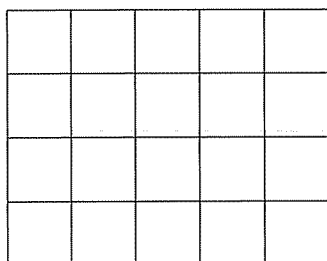
$\frac{1}{4}$ deel van 2 km is m.

$\frac{3}{4}$ deel van 2 km is m.

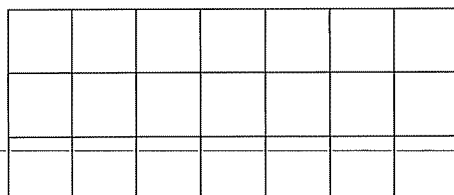
$\frac{1}{5}$ deel van 2 km is m.

$\frac{3}{5}$ deel van 2 km is m.

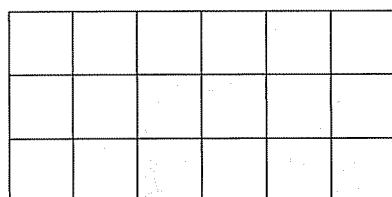
2 Tegelvloertjes leggen.



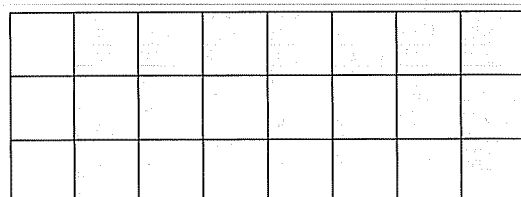
Prijs vloertje: €



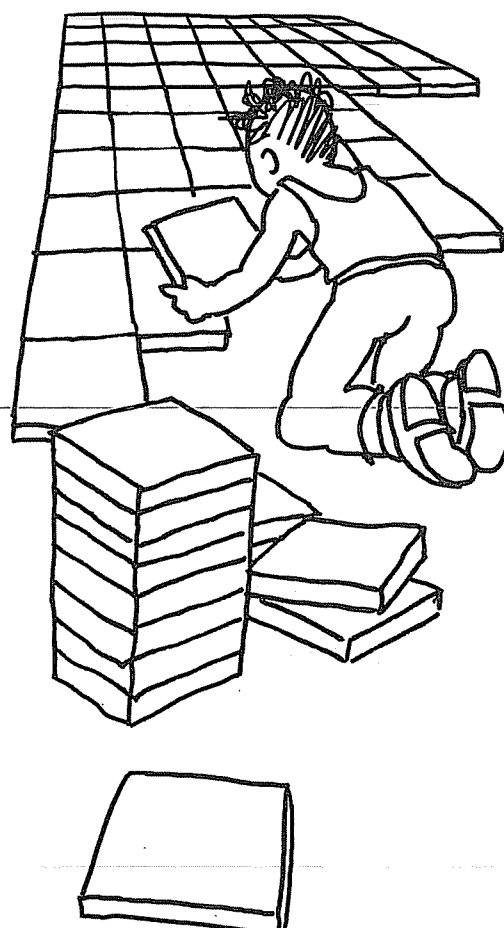
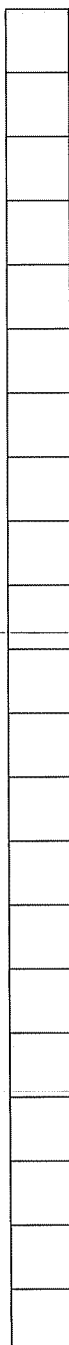
Prijs vloertje: €



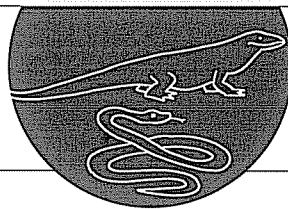
Prijs vloertje: €



Prijs vloertje: €



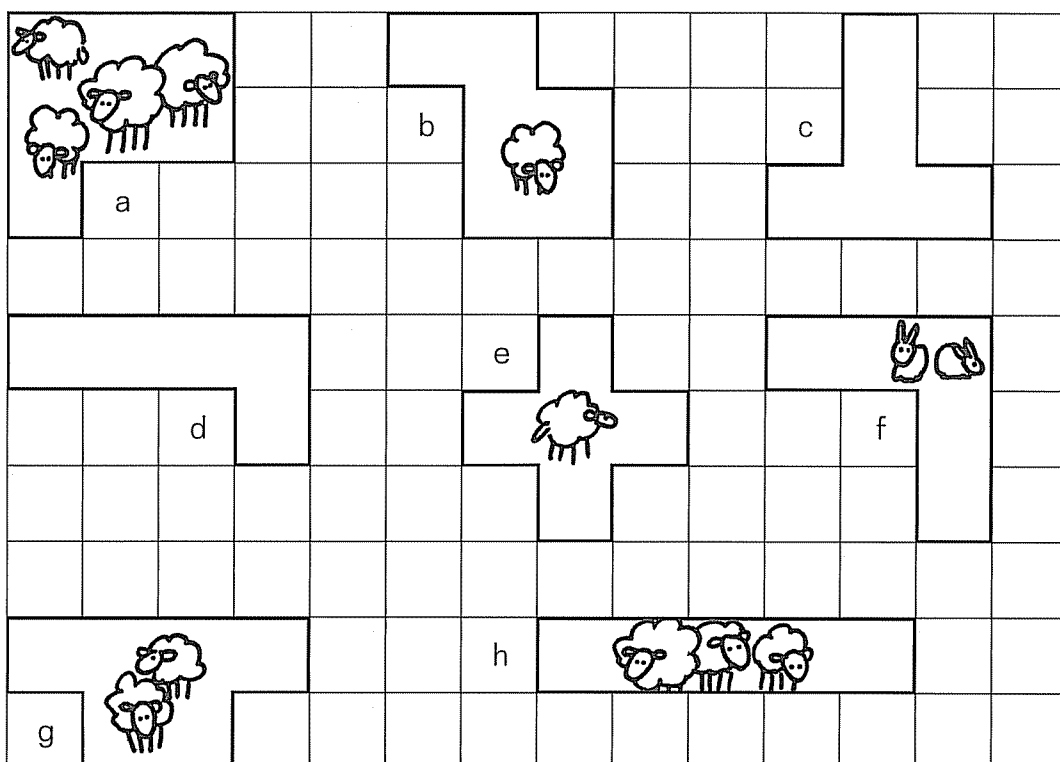
Prijs vloertje: €



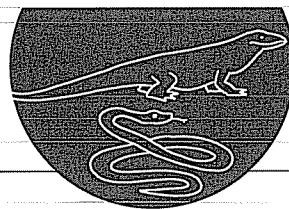
1 Hoeveel is het?

 $\frac{1}{2}$ deel van € 1 is € $\frac{4}{5}$ deel van € 1 is € $\frac{1}{4}$ deel van € 1 is € $\frac{1}{10}$ deel van € 1 is € $\frac{3}{4}$ deel van € 1 is € $\frac{3}{10}$ deel van € 1 is € $\frac{1}{5}$ deel van € 1 is € $\frac{6}{10}$ deel van € 1 is € $\frac{3}{5}$ deel van € 1 is € $\frac{8}{10}$ deel van € 1 is €

2 Hoe groot is het stuk land? En hoeveel hekken zijn nodig?



Welk stuk land?	Hoeveel hekken nodig?	Hoe groot is het stuk land?
a	12 hekken	7 hokjes
b	12 hekken	 hokjes
c	 hekken	 hokjes
d	 hekken	 hokjes
e	 hekken	 hokjes
f	 hekken	 hokjes
g	 hekken	 hokjes
h	 hekken	 hokjes



1 Hoeveel is het?

$$\frac{1}{2} \text{ m} = 0, \dots \text{ m}$$

$$\frac{1}{5} \text{ m} = 0, \dots \text{ m}$$

$$\frac{1}{10} \text{ m} = 0, \dots \text{ m}$$

$$\frac{1}{4} \text{ m} = 0, \dots \text{ m}$$

$$\frac{4}{5} \text{ m} = 0, \dots \text{ m}$$

$$\frac{7}{10} \text{ m} = 0, \dots \text{ m}$$

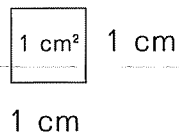
$$\frac{3}{4} \text{ m} = 0, \dots \text{ m}$$

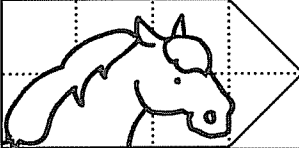
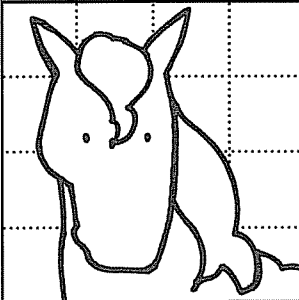
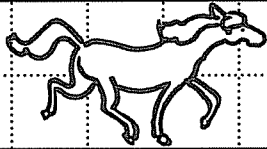
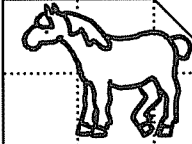
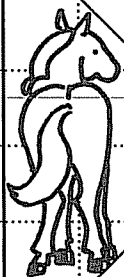
$$\frac{3}{5} \text{ m} = 0, \dots \text{ m}$$

$$\frac{4}{10} \text{ m} = 0, \dots \text{ m}$$

2 Hoe groot is de oppervlakte van de stickers?

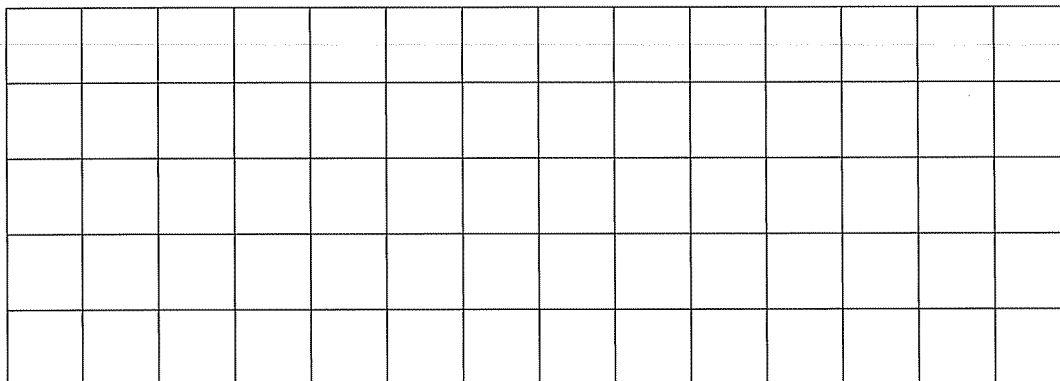
1 cm² is een vierkantje van 1 cm lang en 1 cm breed.

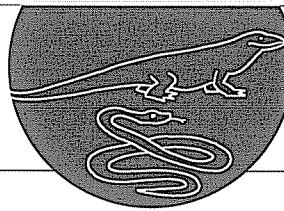


	a	 cm ²		b	 cm ²
	c	 cm ²		d	 cm ²
	e	 cm ²		f	 cm ²
				g	 cm ²

3 Zelf stickers tekenen.

Teken een sticker van 5 cm², van 7 cm² en van 9 cm².





1 Lengtes en afstanden.

Kleur wat langer is.

105 cm	1 m
1 m	95 cm
195 cm	2 m
3 m	275 cm
505 cm	5 m

990 m	1 km
1 km	1010 m
1995 m	2 km
4 km	3899 m
5005 m	5 km

Maak er een meter van:

$$95 \text{ cm} + \dots \text{ cm} = 1 \text{ m}$$

$$75 \text{ cm} + \dots \text{ cm} = 1 \text{ m}$$

$$55 \text{ cm} + \dots \text{ cm} = 1 \text{ m}$$

$$25 \text{ cm} + \dots \text{ cm} = 1 \text{ m}$$

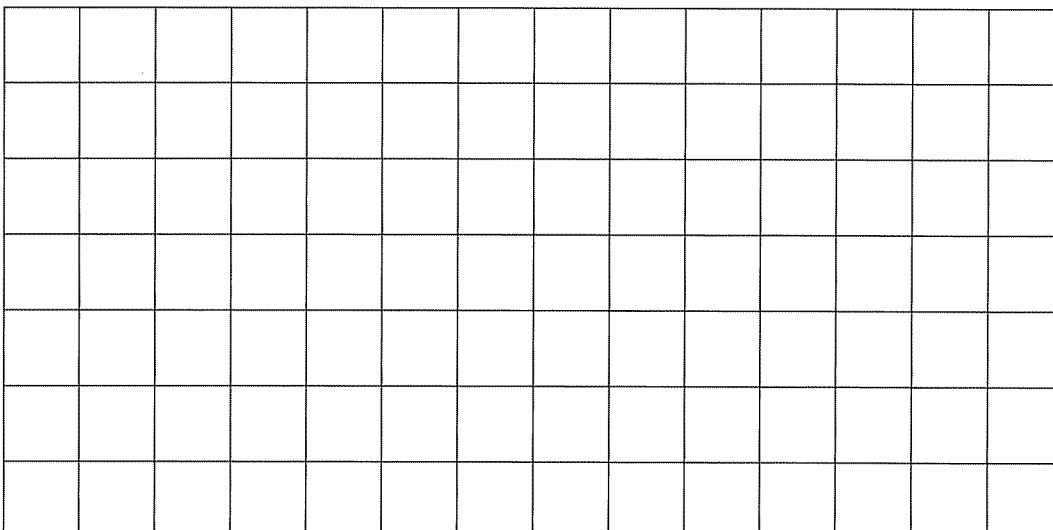
$$5 \text{ cm} + \dots \text{ cm} = 1 \text{ m}$$

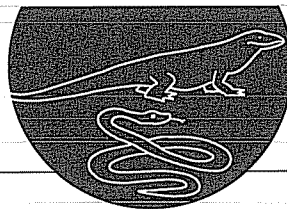
2 Hoe groot is de oppervlakte van de stickers?

a		b		c	
..... cm ²		 cm ²			 cm ²
	d		e		
	 cm ²	 cm ²			

3 Zelf stickers tekenen.

Teken een sticker van 10 cm², van 5 $\frac{1}{2}$ cm², van 7 $\frac{1}{2}$ cm² en van 9 cm².





1 Schrijf het getal in cijfers.

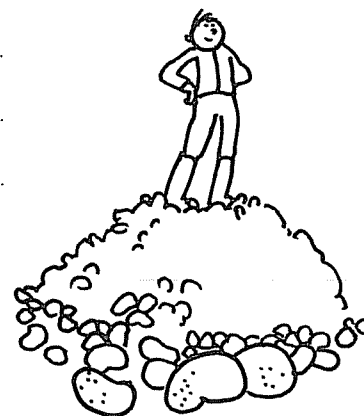
achthonderddrieduizend

zeshonderdachtduizend zes

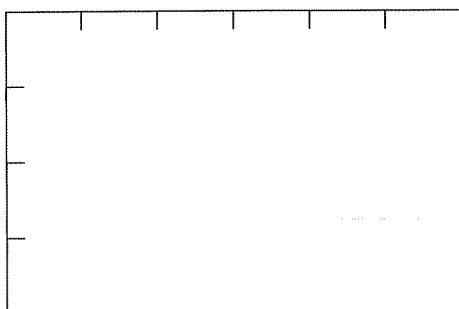
driehonderdduizend dertien

vijfhonderdzestienduizend zestig

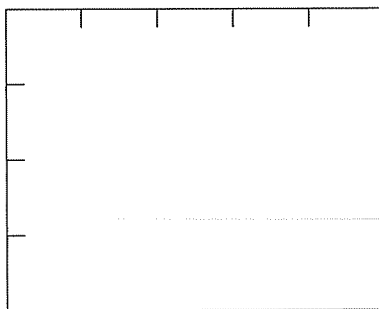
negenhonderdzevenendertigduizend driehonderdacht



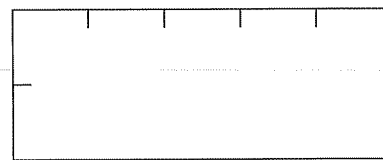
2 Bereken de oppervlakte.



..... cm²

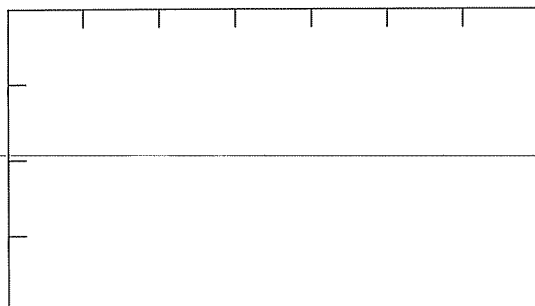


..... cm²

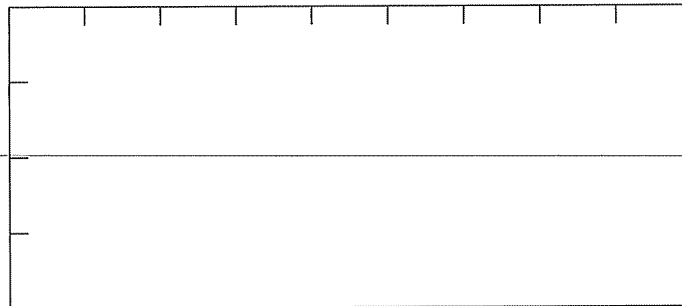


..... cm²

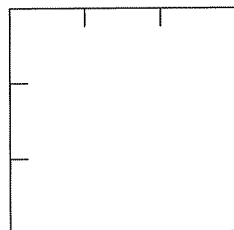
Hoe heb je de oppervlakte berekend?



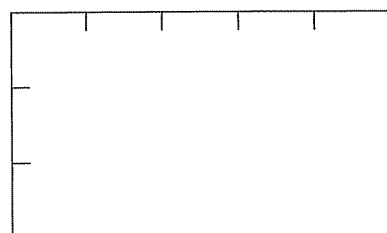
..... cm × cm = cm²



..... cm × cm = cm²



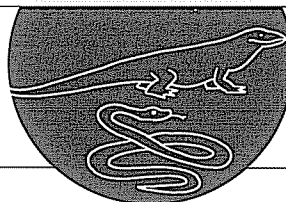
..... cm × cm = cm²



..... cm × cm = cm²

3 Bereken de oppervlakte van de rechthoeken.

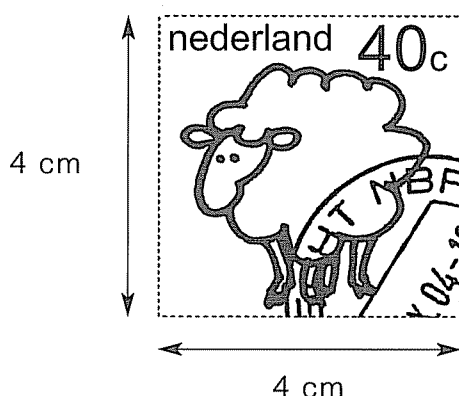
lengte	breedte	oppervlakte
7 cm	8 cm	 cm ²
6 cm	3 cm	 cm ²
9 cm	8 cm	 cm ²
6 cm	9 cm	 cm ²



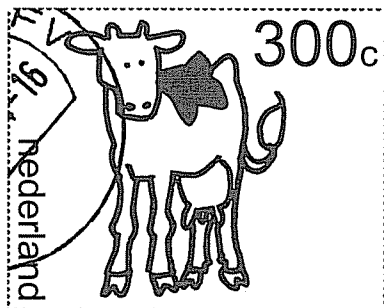
1 Zet de kaartjes op volgorde: van lage naar hoge prijzen.

€ 195.999	€ 199.005	€ 202.200	€	€	€
€ 302.608	€ 297.500	€ 300.955	€	€	€
€ 419.200	€ 420.025	€ 398.888	€	€	€
€ 630.050	€ 595.950	€ 609.899	€	€	€
€ 895.895	€ 900.750	€ 909.009	€	€	€

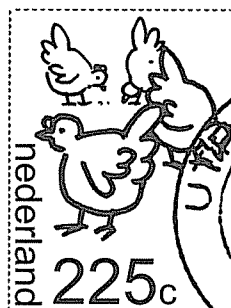
2 Bereken de oppervlakte. Gebruik je liniaal.



$$4 \text{ cm} \times 4 \text{ cm} = 16 \text{ cm}^2$$



$$\dots \text{ cm} \times \dots \text{ cm} = \dots \text{ cm}^2$$



$$\dots \text{ cm} \times \dots \text{ cm} = \dots \text{ cm}^2$$



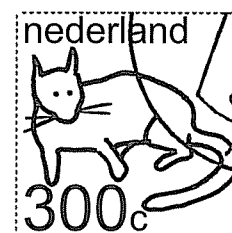
$$\dots \text{ cm} \times \dots \text{ cm} = \dots \text{ cm}^2$$



$$\dots \text{ cm}^2$$



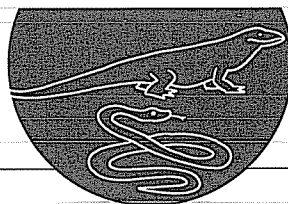
$$\dots \text{ cm}^2$$



$$\dots \text{ cm}^2$$

3 Bereken de oppervlakte van de postzegels.

lengte	breedte	oppervlakte
6 cm	3 cm	 cm ²
4 cm	4 cm	 cm ²
6 cm	7 cm	 cm ²

**1 Aftrekken.**

$1000 - 500 = \dots\dots\dots$

$1000 - 300 = \dots\dots\dots$

$1000 - 700 = \dots\dots\dots$

$5000 - 500 = \dots\dots\dots$

$3000 - 300 = \dots\dots\dots$

$7000 - 700 = \dots\dots\dots$

$1750 - 500 = \dots\dots\dots$

$1750 - 300 = \dots\dots\dots$

$1750 - 700 = \dots\dots\dots$

$1200 - 500 = \dots\dots\dots$

$2100 - 300 = \dots\dots\dots$

$1400 - 700 = \dots\dots\dots$

$3300 - 500 = \dots\dots\dots$

$5200 - 300 = \dots\dots\dots$

$2100 - 700 = \dots\dots\dots$

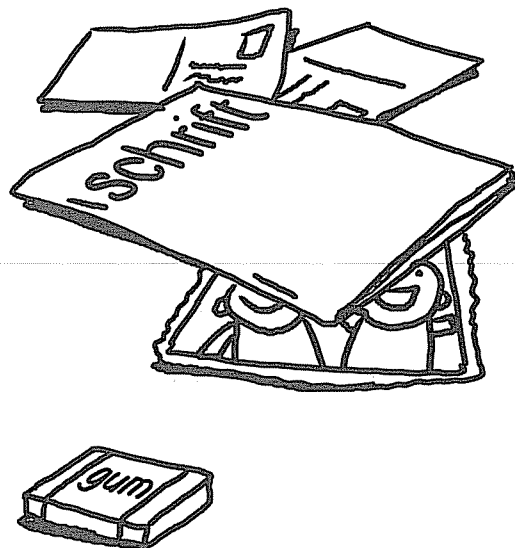
2 De oppervlakte van dingen berekenen.

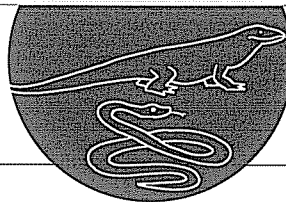
Je hebt nodig: werkblad 92.



Eerst schatten en dan precies rekenen.

Ding:	Ik schat:	Ik reken:
schrift	 cm ²	 cm ²
rekenboek	 cm ²	 cm ²
gum	 cm ²	 cm ²
foto	 cm ²	 cm ²
ansichtkaart	 cm ²	 cm ²
.....	 cm ²	 cm ²
.....	 cm ²	 cm ²
.....	 cm ²	 cm ²
.....	 cm ²	 cm ²





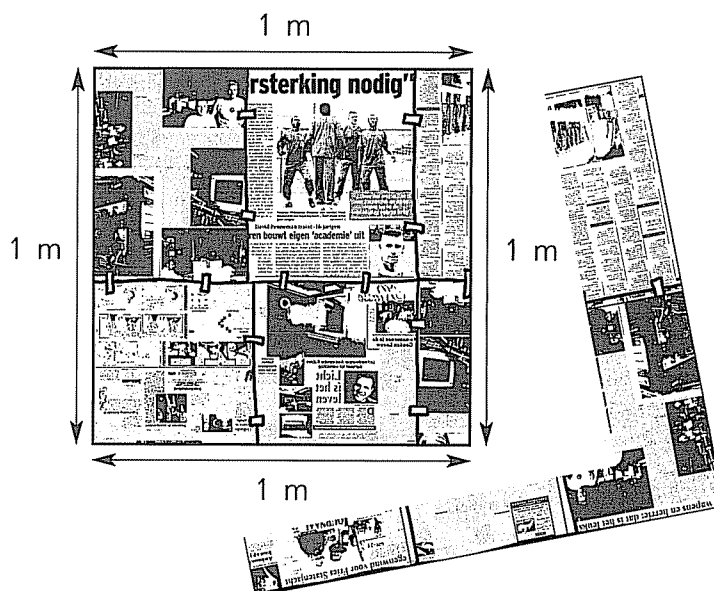
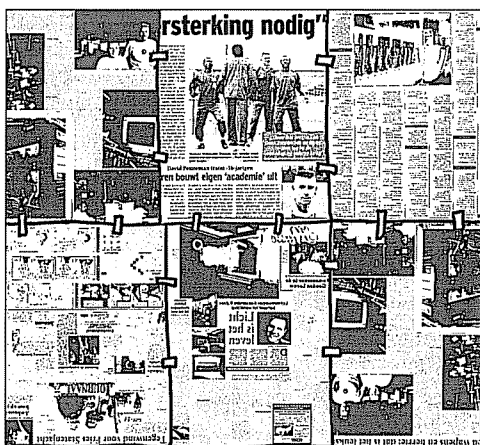
1 Reken handig.

$2 \times 25 = \dots\dots\dots$	$2 \times 50 = \dots\dots\dots$	$2 \times 250 = \dots\dots\dots$
$4 \times 25 = \dots\dots\dots$	$4 \times 50 = \dots\dots\dots$	$4 \times 250 = \dots\dots\dots$
$8 \times 25 = \dots\dots\dots$	$8 \times 50 = \dots\dots\dots$	$8 \times 250 = \dots\dots\dots$
$10 \times 25 = \dots\dots\dots$	$10 \times 50 = \dots\dots\dots$	$10 \times 250 = \dots\dots\dots$
$12 \times 25 = \dots\dots\dots$	$12 \times 50 = \dots\dots\dots$	$12 \times 250 = \dots\dots\dots$

2 Een vierkante meter maken.

Plak een paar uitgevouwen kranten aan elkaar.

Teken daar een vierkante meter op en knip die uit.



Zoek dingen in de klas die ongeveer een vierkante meter groot zijn.

.....

.....

.....

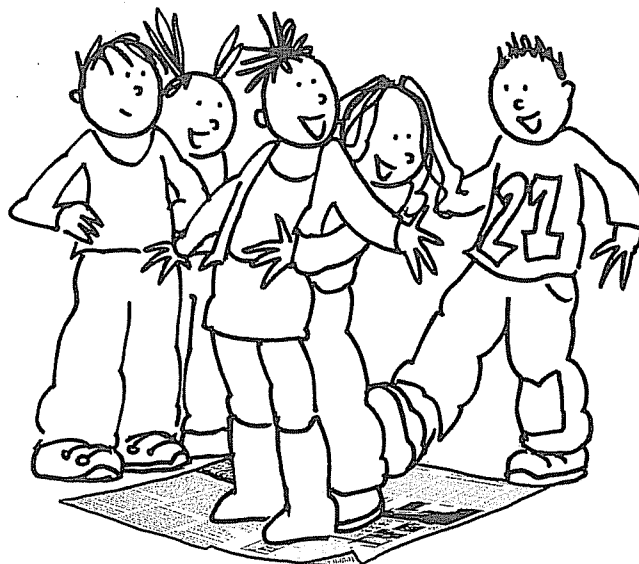
.....

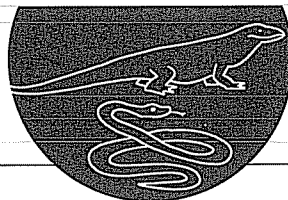
.....

Hoeveel kinderen passen er op een vierkante meter?

.....

.....





1 Deelsommen.

$50 : 2 = \dots\dots\dots$

$100 : 4 = \dots\dots\dots$

$100 : 5 = \dots\dots\dots$

$500 : 2 = \dots\dots\dots$

$200 : 4 = \dots\dots\dots$

$200 : 5 = \dots\dots\dots$

$1000 : 2 = \dots\dots\dots$

$400 : 4 = \dots\dots\dots$

$400 : 5 = \dots\dots\dots$

$1500 : 2 = \dots\dots\dots$

$500 : 4 = \dots\dots\dots$

$1000 : 5 = \dots\dots\dots$

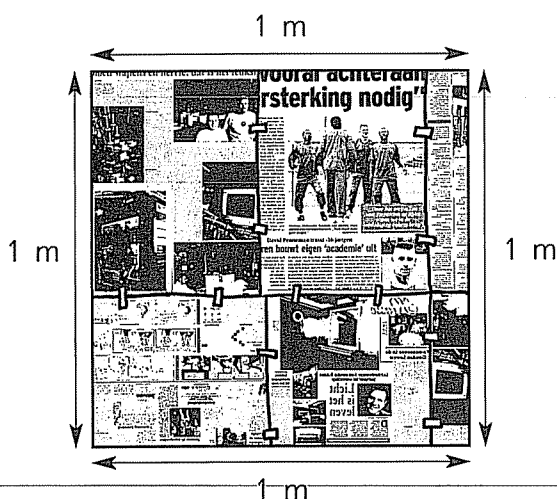
$5000 : 2 = \dots\dots\dots$

$1000 : 4 = \dots\dots\dots$

$2000 : 5 = \dots\dots\dots$

2 Meten met vierkante meters.

Gebruik de vierkante meters die jullie van kranten hebben gemaakt.



Klap het schoolbord uit. Hoeveel vierkante meter is de oppervlakte ongeveer?
(Hoeveel vierkante meters passen erop?)

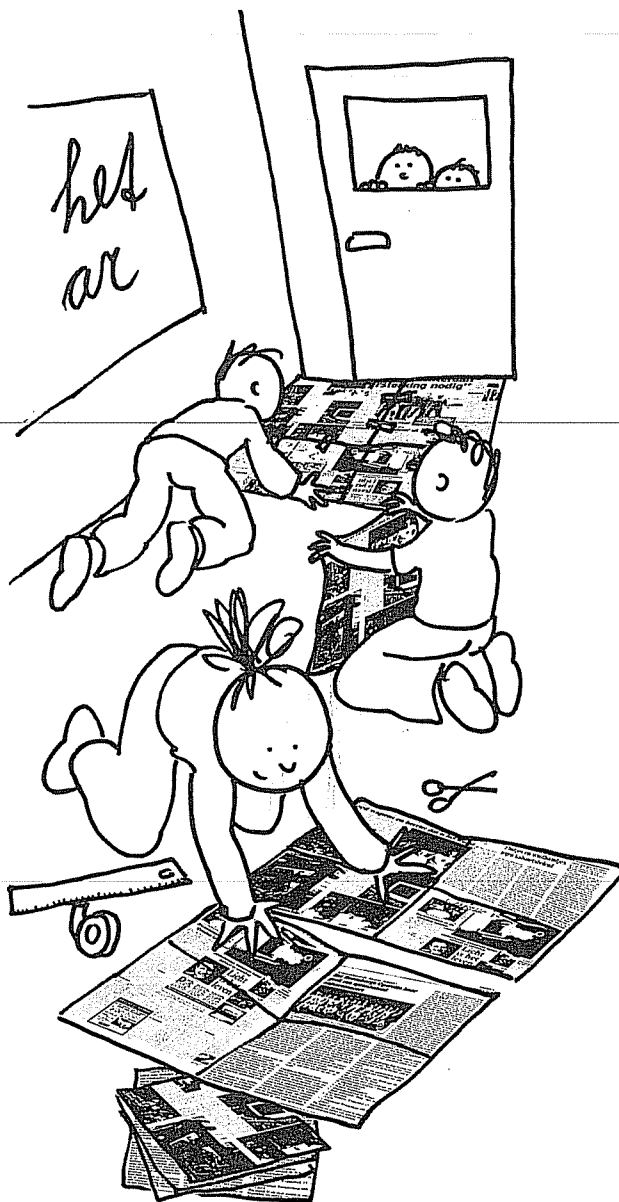
.....

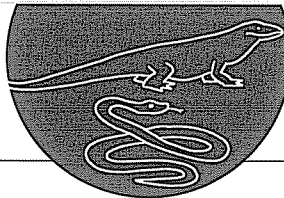
Zoek een grote tafel. Hoeveel vierkante meter is de oppervlakte ongeveer?
(Hoeveel vierkante meters passen erop?)

.....

Wat is de oppervlakte van jullie lokaal?
(Hoeveel vierkante meters passen daarin?)

.....





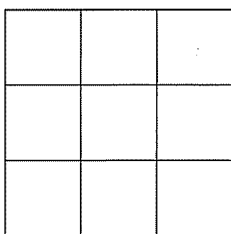
1 Schrijf de helft eronder.

€ 1	€ 2	€ 3	€ 5	€ 7	€ 9	€ 10	€ 11	€ 13	€ 15
€	€	€	€	€	€	€	€	€	€

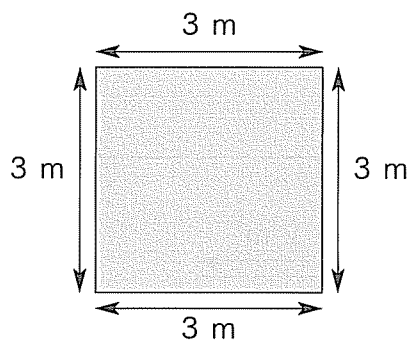
€ 15	€ 20	€ 30	€ 50	€ 55	€ 60	€ 70	€ 75	€ 90	€ 95
€	€	€	€	€	€	€	€	€	€

2 Schooltuintjes: oppervlakte en omtrek.

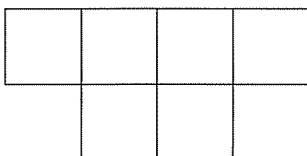
Elk vierkantje is in het echt een vierkant van 1 meter lang en 1 meter breed.



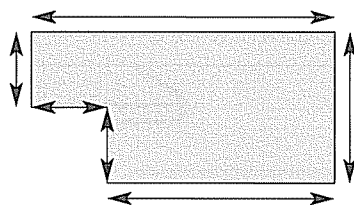
Oppervlakte: 9 m²



Omtrek: 12 m

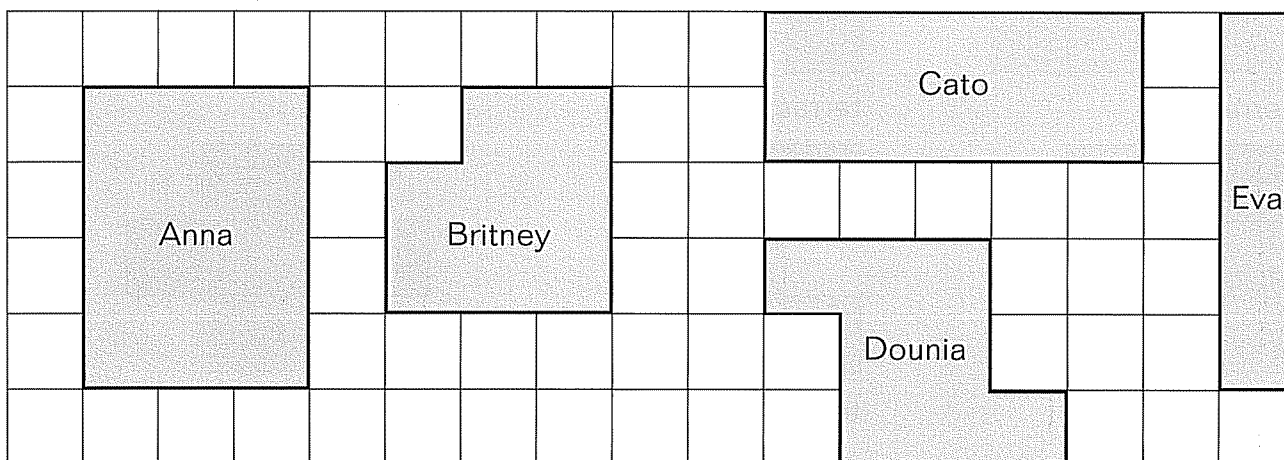


Oppervlakte: m²

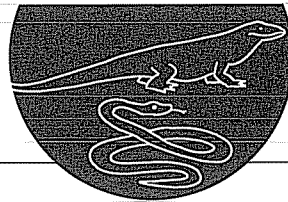


Omtrek: m

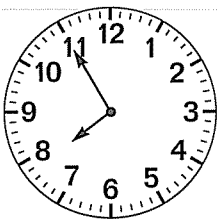
Reken nu de oppervlakte en omtrek van deze tuintjes uit.



Tuin van:	Anna	Britney	Cato	Dounia	Eva
Oppervlakte:	 m ²	 m ²	 m ²	 m ²	 m ²
Omtrek:	 m	 m	 m	 m	 m

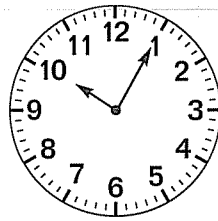


1 Welke twee digitale tijden horen erbij?



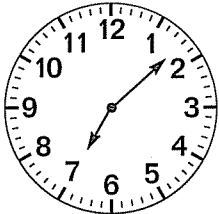
..... uur

..... uur



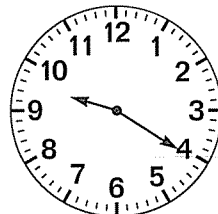
..... uur

..... uur



..... uur

..... uur

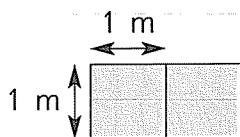


..... uur

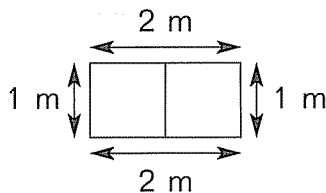
..... uur

2 Terrassen meten.

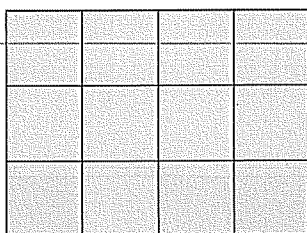
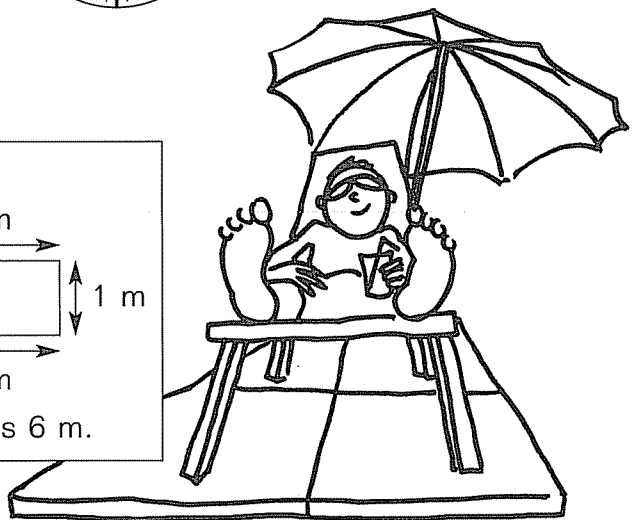
1 cm² op de tekening is 1 m² in het echt.



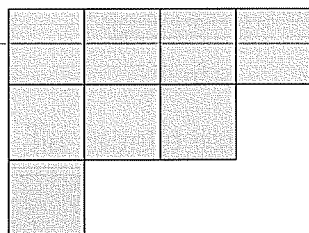
De oppervlakte is:
2 vierkante meter (2 m²).



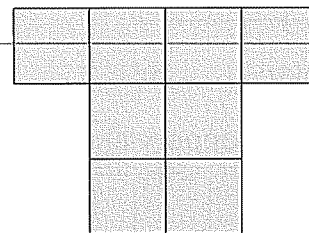
De omtrek is 6 m.



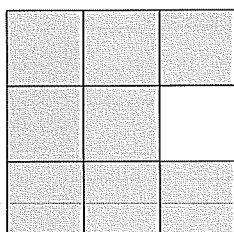
terras a



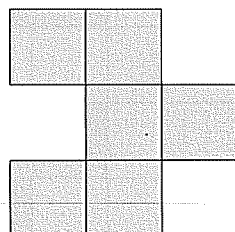
terras b



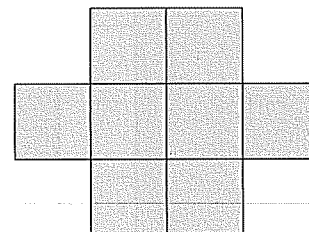
terras c



terras d

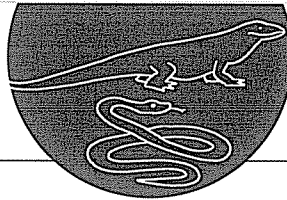


terras e

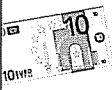


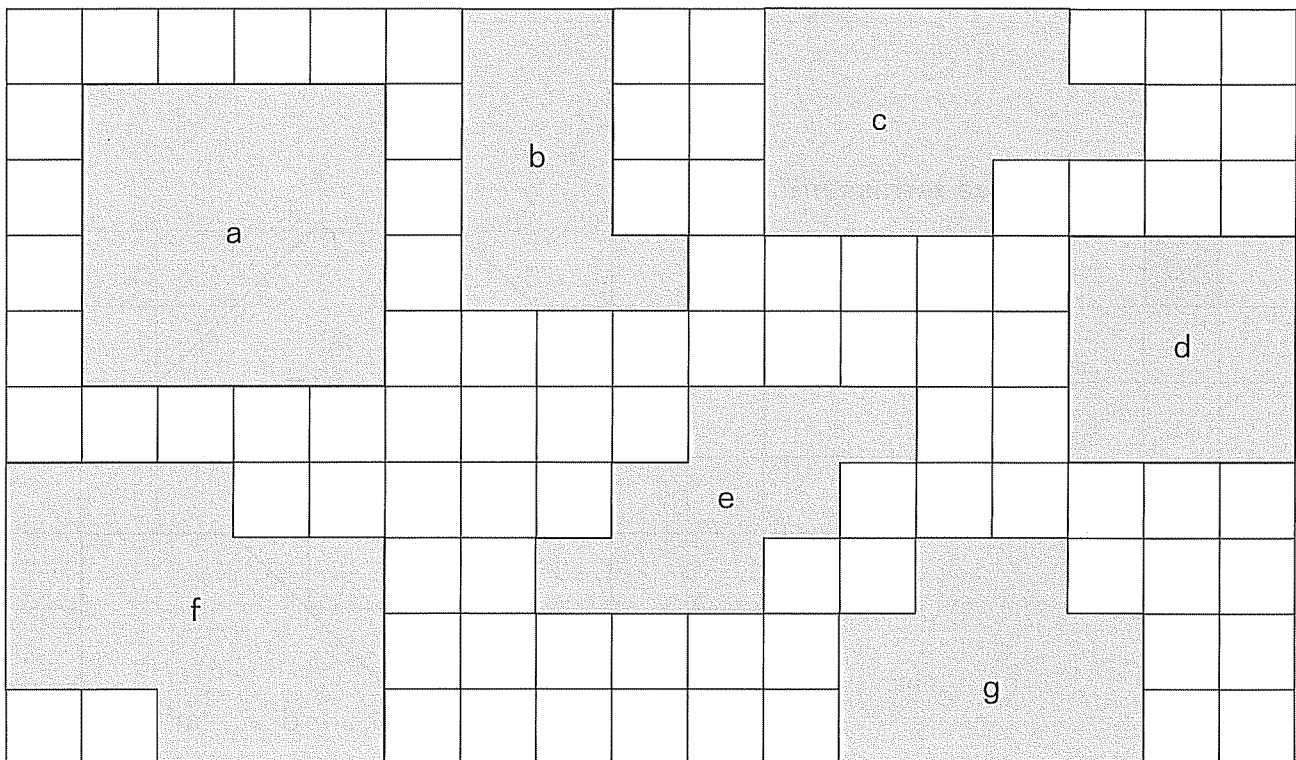
terras f

terras	a	b	c	d	e	f
oppervlakte	 m ²	 m ²	 m ²	 m ²	 m ²	 m ²
omtrek	 m	 m	 m	 m	 m	 m



1 Met welke biljetten en munten kun je betalen?

bedrag									
€ 8,65									
€ 17,90									
€ 38,85									
€ 48,15									
€ 69,55									

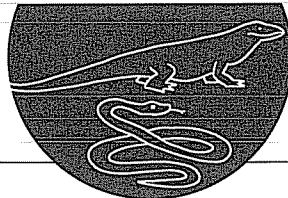
2 Terrassen. 1 cm² op de tekening is 1 m² in het echt.

Zo'n stuk terras aanleggen kost € 20.

terras	a	b	c	d	e	f	g
oppervlakte	 m ²	 m ²	 m ²	 m ²	 m ²	 m ²	 m ²
omtrek	 m	 m	 m	 m	 m	 m	 m
prijs	€	€	€	€	€	€	€

Welke terrassen hebben dezelfde oppervlakte?

Welke terrassen hebben dezelfde omtrek?

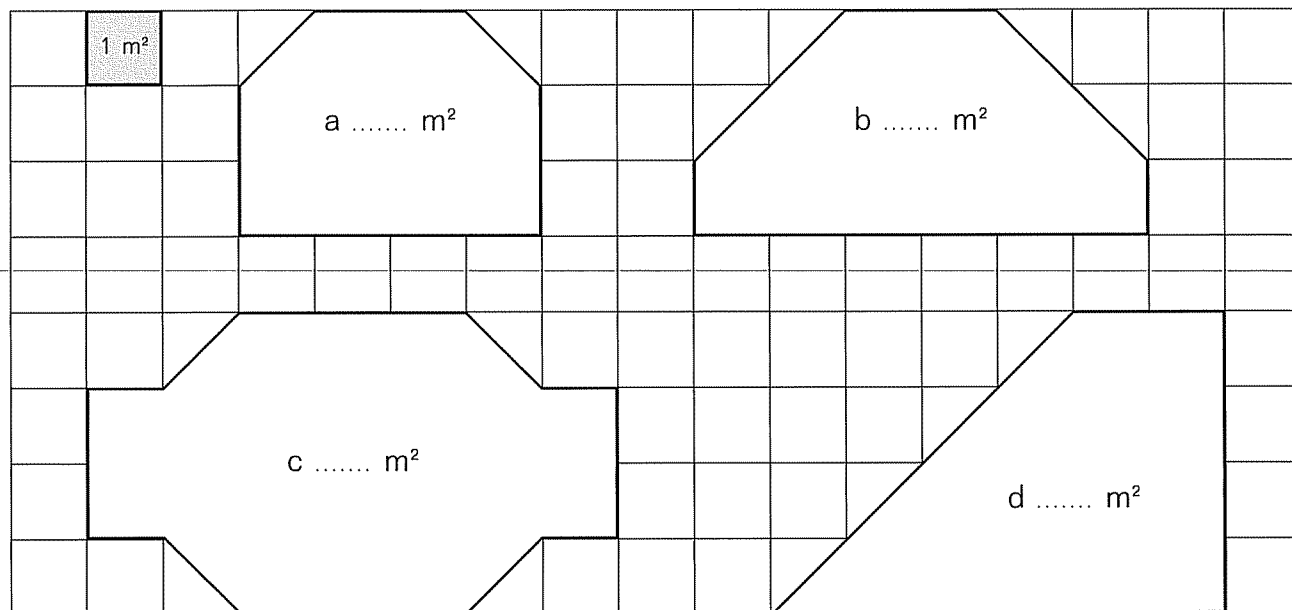


1 Hoeveel krijg je terug?

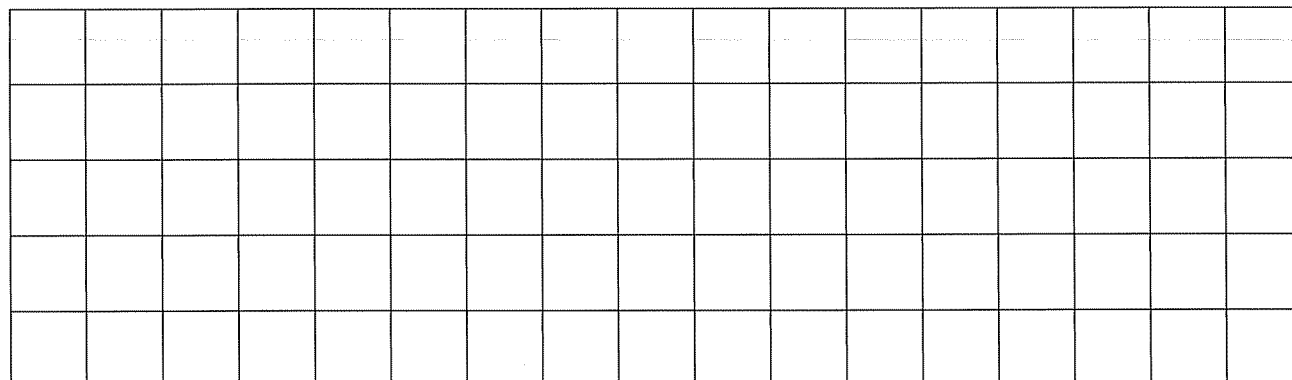
Je moet betalen:	Je geeft:	Je krijgt terug:
€ 0,85		€
€ 1,75		€
€ 4,40		€
€ 3,95		€
€ 0,45		€
€ 2,70		€
€ 6,95		€
€ 18,95		€

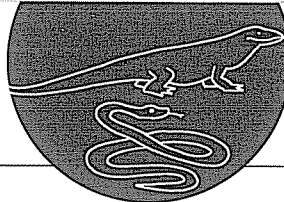


2 Hoe groot zijn deze terrassen?



Bedenk nu zelf nog twee terrassen van 12 m².



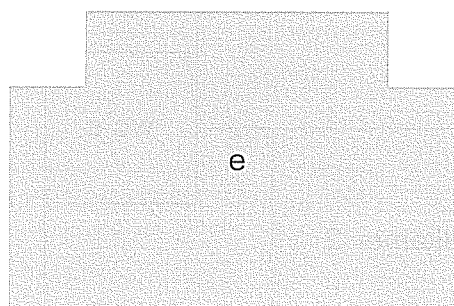
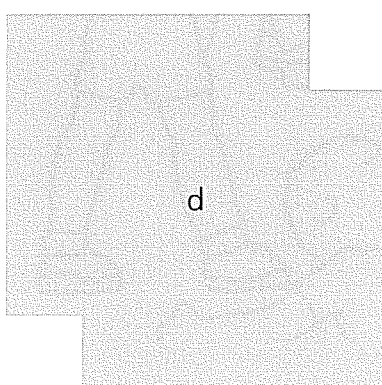
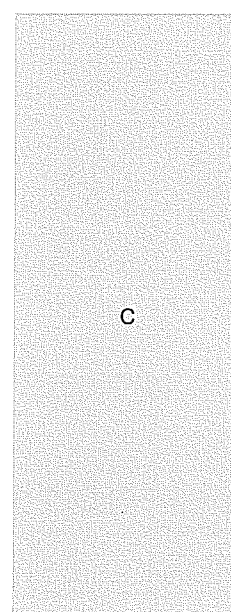
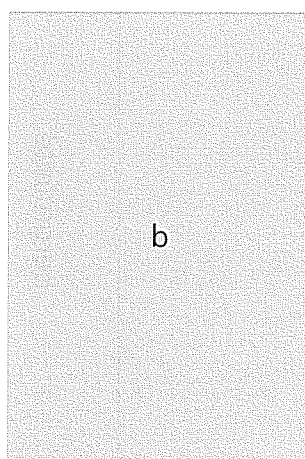
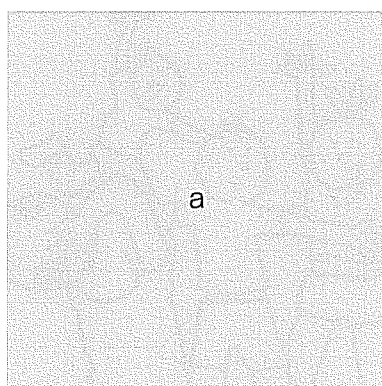
**1 Vul de tabellen verder in.**

Hoe lang loop je erover?

afstand	250 m	500 m	750 m	1000 m	1250 m	1500 m	1750 m	2000 m
tijd	4 min.							

Hoe lang fiets je erover?

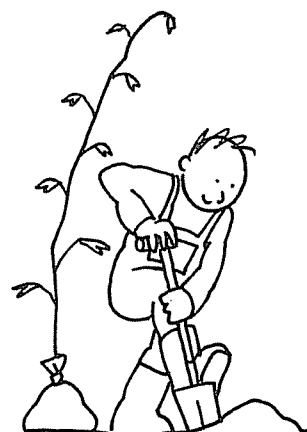
afstand	1 km	2 km	3 km	4 km	5 km	6 km	7 km	8 km
tijd	4 min.							

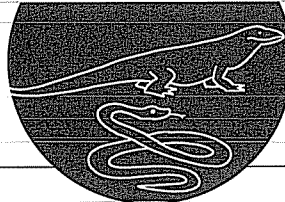
2 Hoe groot zijn de tuinen?1 cm op de tekening is in het echt 2 m. 2 m

tuin	a	b	c	d	e
omtrek	 m	 m	 m	 m	 m
oppervlakte	 m ²	 m ²	 m ²	 m ²	 m ²

Welke tuinen hebben dezelfde omtrek?

Welke tuinen hebben dezelfde oppervlakte?





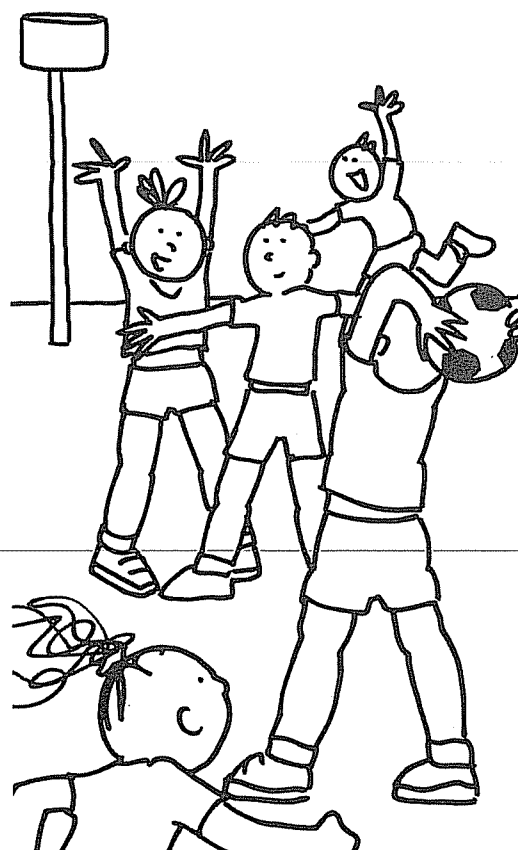
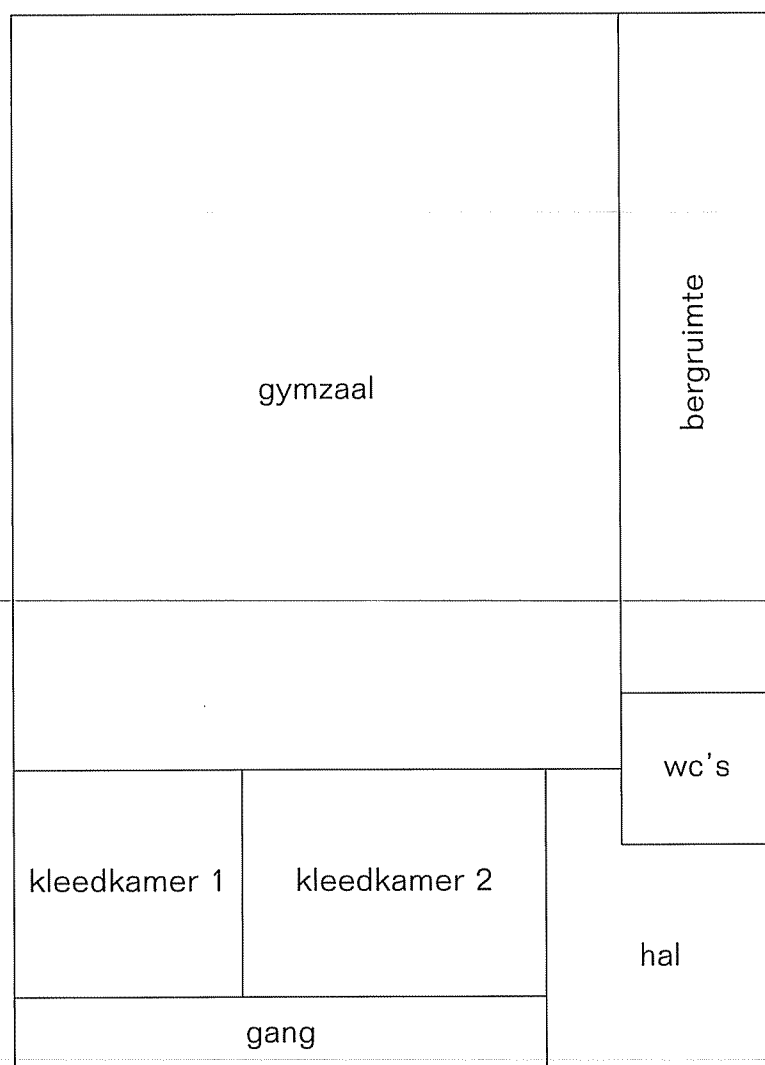
1 Kleur wat meer is.

50 cm	5 m
75 cm	1 m
250 cm	2 m
8 dm	1 m
2 dm	15 cm

25 mm	3 cm
60 mm	5 cm
750 m	1 km
1100 m	1 km
3500 m	3 km

8 cm	0,10 m
75 cm	0,80 m
120 cm	1,15 m
175 cm	1,50 m
405 cm	3,95 m

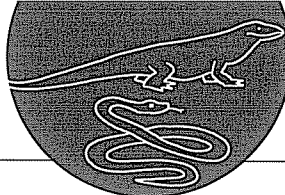
2 Plattegrond van de gymzaal.



1 cm op de tekening
is in het echt 2 m. $\overline{2\text{ m}}$

ruimte	zaal	berg- ruimte	wc's	kleed- kamer 1	kleed- kamer 2	gang	hal
omtrek	 m	 m	 m	 m	 m	 m	 m
oppervlakte	 m ²	 m ²	 m ²	 m ²	 m ²	 m ²	 m ²

Hoe groot is het hele gebouw? Oppervlakte: m² Omtrek: m



1 Vul steeds aan tot 1 liter.

9 dl + dl

90 cl + cl

900 ml + ml

1 dl + dl

40 cl + cl

500 ml + ml

6 dl + dl

60 cl + cl

700 ml + ml

2 dl + dl

30 cl + cl

100 ml + ml

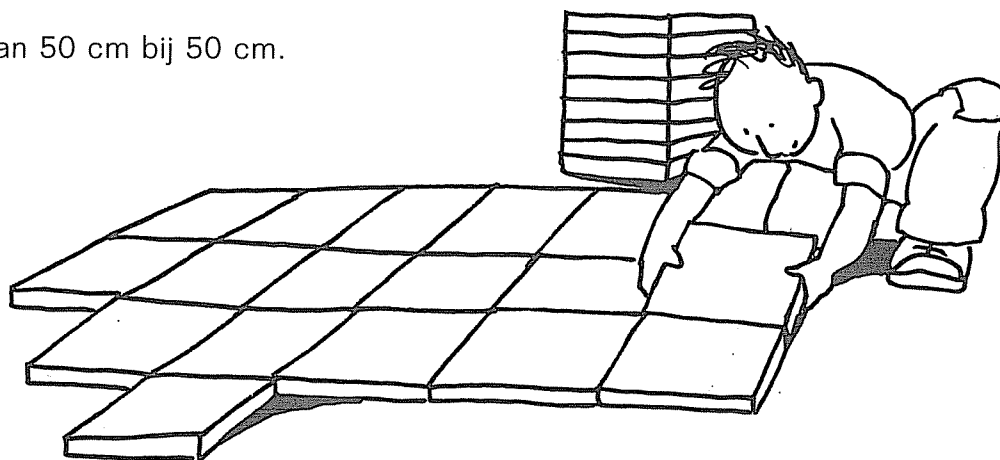
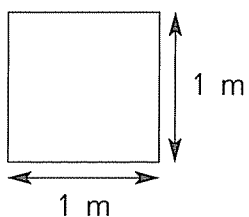
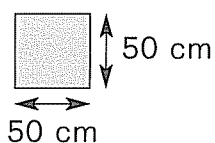
5 dl + dl

90 cl + cl

700 ml + ml

2 Tegels leggen.

Hans legt tegels van 50 cm bij 50 cm.

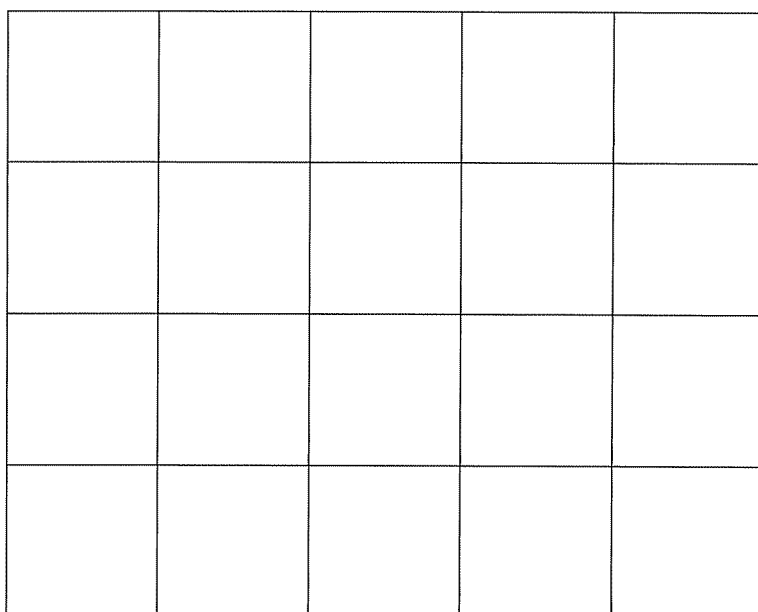


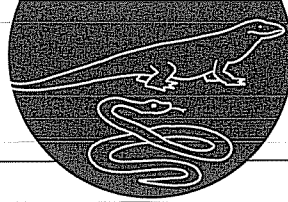
Hoeveel tegels passen er in een vierkante meter?

Teken ze er maar in.

De kamer is 5 meter lang en 4 meter breed.

Hoeveel tegels heeft Hans nodig?





Ruitjespapier.

