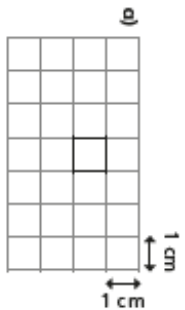


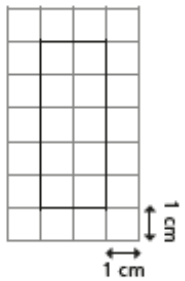
Area of rectangles



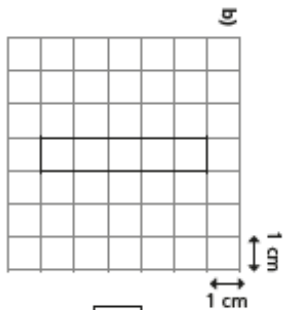
- 1 On the grid, the area of each square is 1 cm^2 . Calculate the area of each rectangle.



$$1 \text{ cm}^2$$



$$10 \text{ cm}^2$$



$$5 \text{ cm}^2$$

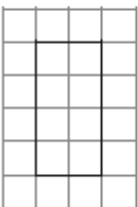
- 2 Complete the sentences to describe the rectangle.

There are rows.

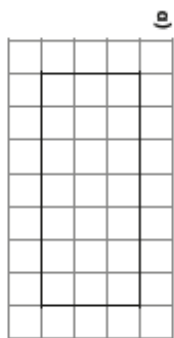
Each row has squares.

There are squares altogether.

$$\begin{array}{r} \boxed{2} \times \boxed{4} = \boxed{8} \end{array}$$

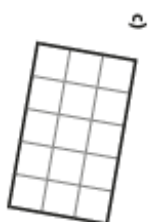


- 3 The area of each square is 1 cm^2 . Work out the area of each rectangle.



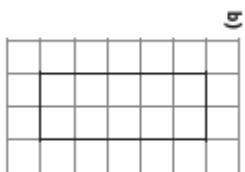
$$\begin{array}{r} \boxed{3} \times \boxed{7} = \boxed{21} \end{array}$$

$$\text{area} = \boxed{21 \text{ cm}^2}$$



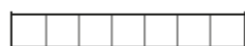
$$\begin{array}{r} \boxed{3} \times \boxed{5} = \boxed{15} \end{array}$$

$$\text{area} = \boxed{15 \text{ cm}^2}$$



b)

d)



$$\begin{array}{r} \boxed{5} \times \boxed{2} = \boxed{10} \end{array}$$

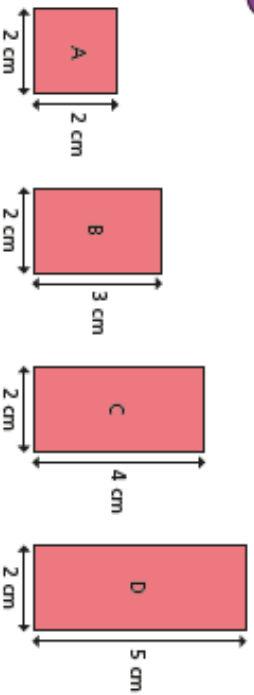
$$\text{area} = \boxed{10 \text{ cm}^2}$$

$$\begin{array}{r} \boxed{7} \times \boxed{1} = \boxed{7} \end{array}$$

$$\text{area} = \boxed{7 \text{ cm}^2}$$

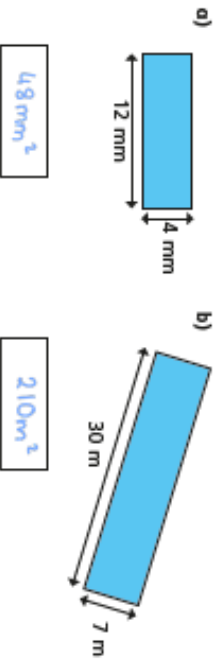


- 4 Calculate the area of the rectangles.

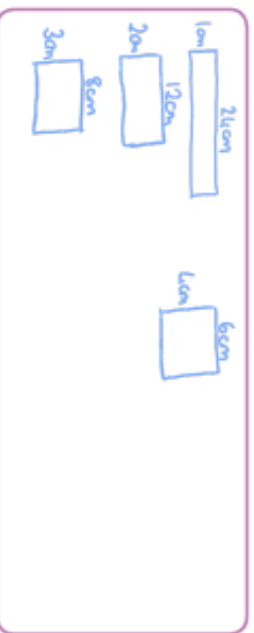


A = cm^2 B = cm^2 C = cm^2 D = cm^2

- 5 Work out the area of these rectangles.

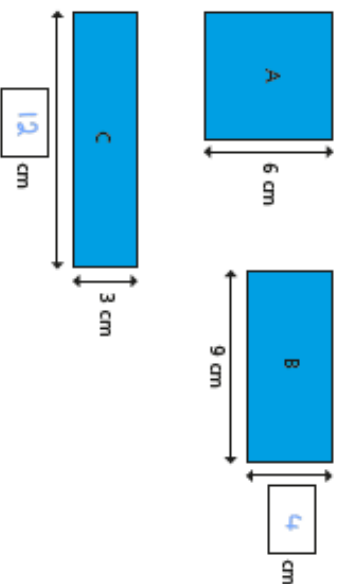


- 6 How many rectangles can you draw that have an area of 24 cm^2 ? Label the lengths. Your drawings do not have to be exact.



Compare your answers with a partner.

- 7 These shapes all have the same area. Shape A is a square. Work out the missing lengths.



- 8 A rectangle has an area of 96 cm^2 . The length of the rectangle is 4 cm longer than the width. Work out the length and width of the rectangle.

length = width =

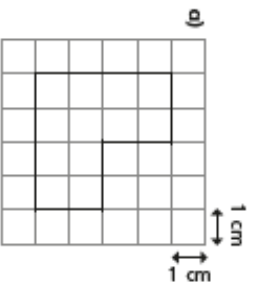
Monday



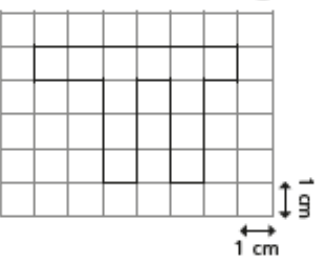
Area of compound shapes



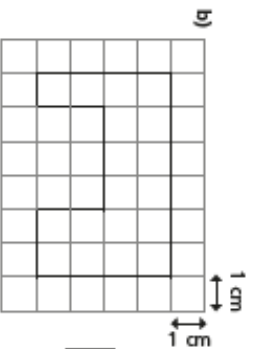
- 1 On the grid, the area of each square is 1 cm^2 . Calculate the area of each shape.



12 cm^2

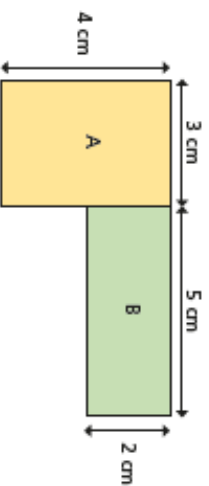


12 cm^2



18 cm^2

- 2



- a) Work out the area of rectangle A

area = 12 cm^2

- b) Work out the area of rectangle B

area = 10 cm^2

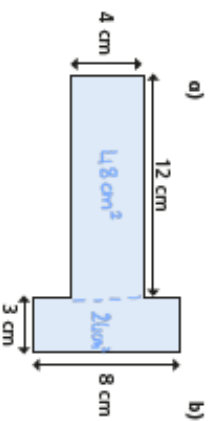
- c) Work out the area of the compound shape.

area = 22 cm^2

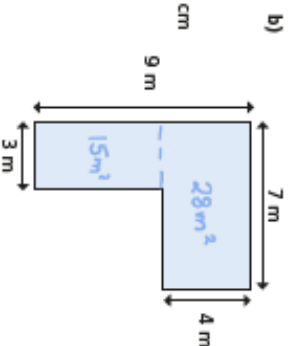
Talk about it with your partner.

- 3

- Work out the area of each of the following shapes. Show all your working.



72 cm^2



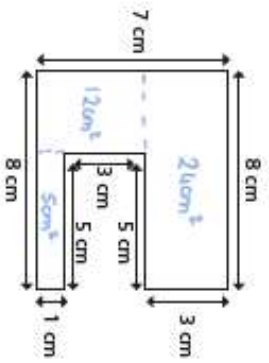
43 m^2



4

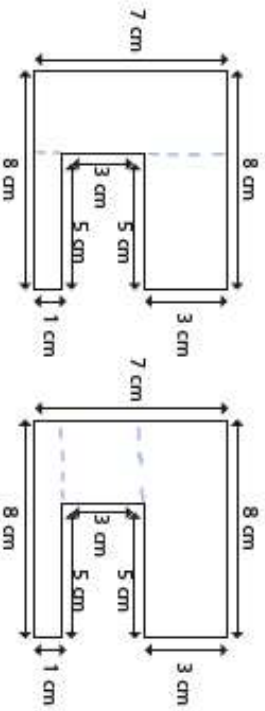
Calculate the area of the compound shapes.

a) Mark on the shape how you partitioned it.



41 cm²

b) Show how you can partition the shape in two other ways.



c) Alex has calculated the area of the same shape below.

$$\begin{aligned} 8 \times 7 &= 56 \\ 5 \times 3 &= 15 \\ 56 - 15 &= 41 \text{ cm}^2 \end{aligned}$$

Explain the method Alex has used.

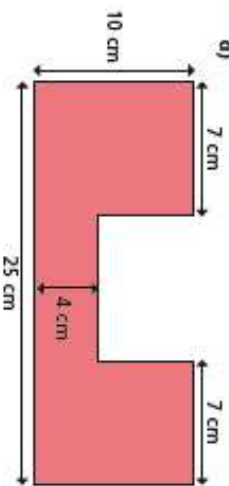
She has found the area of the larger rectangle and subtracted the area of the 'missing' rectangle.



5

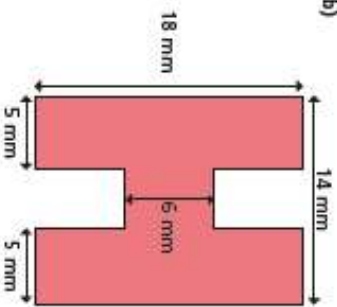
Calculate the area of these compound shapes.

a)



184 cm²

b)

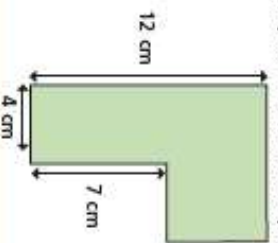


204 mm²

5

The area of this shape is 83 cm².

Work out the perimeter of the shape.



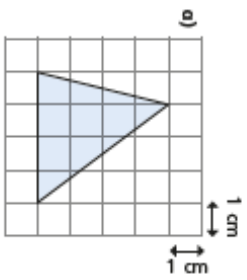
46 cm



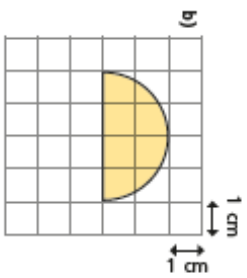
Area of irregular shapes



- 1 On the grid, the area of each square is 1 cm^2 . Estimate the area of each shape.

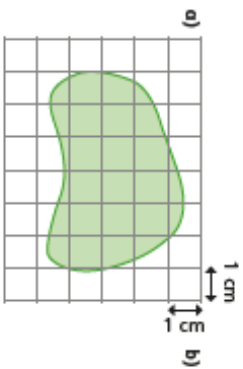


8 cm^2

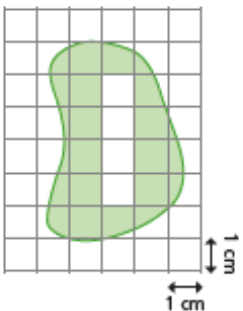


6 cm^2

- 2 Mo draws two shapes on a cm^2 grid. Estimate the area of each shape.



20 cm^2



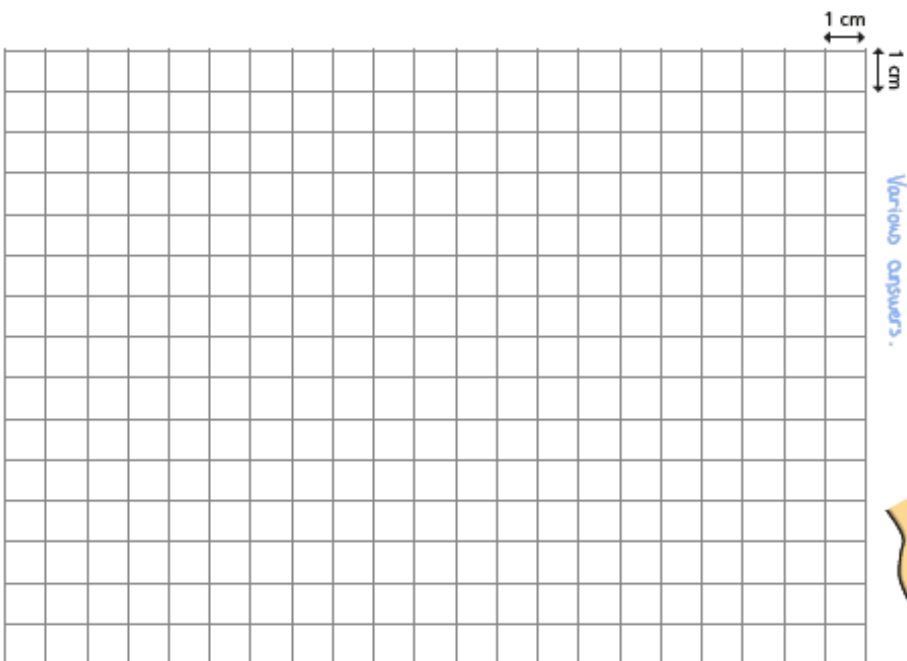
16 cm^2

Wednesday

How did you estimate the area of b)?
Talk about it with your partner.

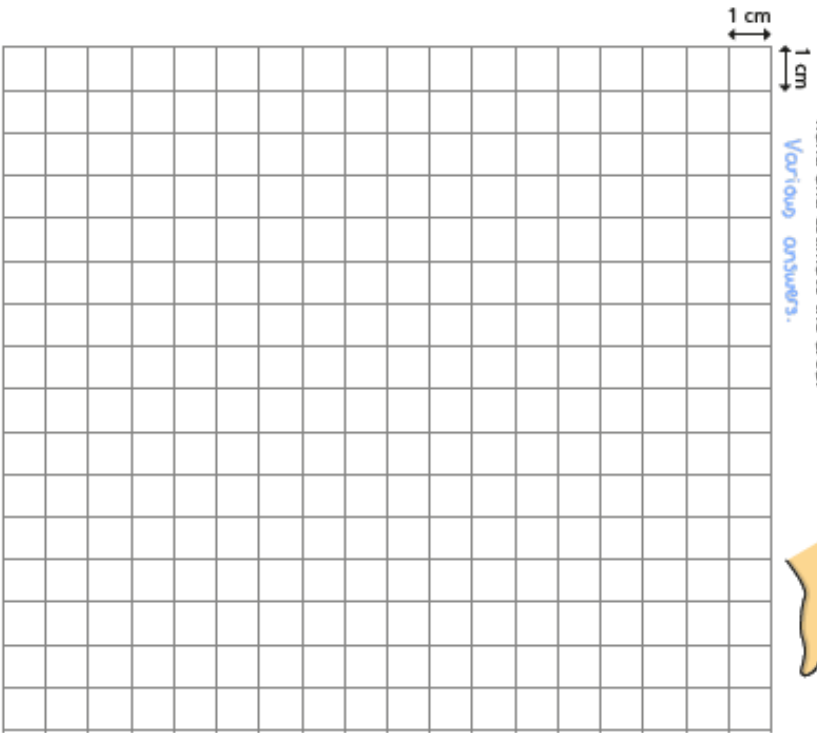


3 a) On the grid below, draw around your closed hand and estimate the area.
Various answers.



b) On the grid below, draw around your open hand and estimate the area.

Various answers.



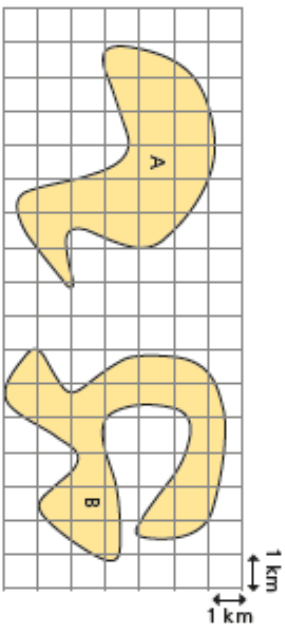
c) Compare your estimates for a) and b). Do you notice anything?



4

Here is the outline of two islands. Each square represents 1 km^2 of land.

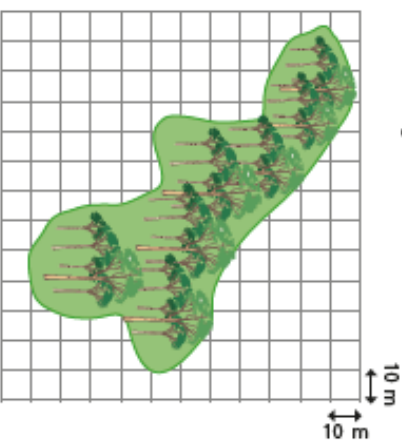
Which island has the greater area and how much greater is it?



A has a greater area by approximately 2 km^2

5

This is the outline of a large forest area.



Estimate the area of the forest.

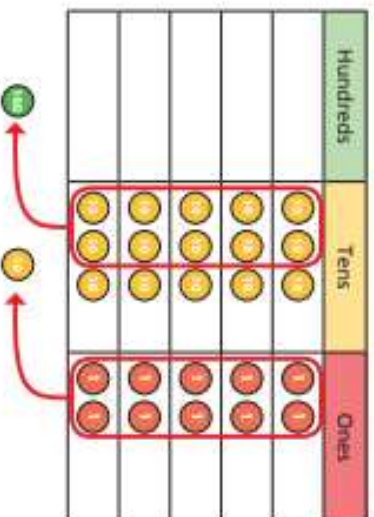
4600 m^2



Multiply 2-digits by 1-digit



- 1 Brett uses a place value chart to work out 5×32 .



Talk about Brett's method with a partner.
Complete the multiplication.

$$5 \times 32 = \boxed{160}$$

Use Brett's method to work out 6×34

$$6 \times 34 = \boxed{204}$$



- 2 Rosie works out 4×37 using a written method.

	H	T	O
\times	3	7	
	4		
	2	8	
	1	2	0
	1	4	8

Diagram description: A written multiplication method on a grid. The multiplicand 37 is in the Tens and Ones columns. The multiplier 4 is in the Ones column. The partial products are: 28 (from 7x4), 120 (from 30x4), and 148 (the final product). The final product 148 is boxed.

Talk about Rosie's method with a partner.

Use Rosie's method to work out 6×28

	T	O
\times	2	8
	4	8
	1	2
	1	6
	1	6

Diagram description: A written multiplication method on a grid. The multiplicand 28 is in the Tens and Ones columns. The multiplier 6 is in the Ones column. The partial products are: 48 (from 8x6), 120 (from 20x6), and 168 (the final product). The final product 168 is boxed.

- 3 Danl uses a different written method to work out 8×42

	H	T	O
\times		4	2
			8
	3	3	6

Diagram description: A written multiplication method on a grid. The multiplicand 42 is in the Tens and Ones columns. The multiplier 8 is in the Ones column. The partial products are: 8 (from 2x8), 336 (from 40x8), and 336 (the final product). The final product 336 is boxed.

Talk about Danl's method with a partner.



Thursday

Use Doni's method to work out 3×27

$$\begin{array}{r} 27 \\ \times 3 \\ \hline 81 \\ 2 \end{array}$$

81

Use a written method to complete the multiplications.

a) $38 \times 6 =$ 228

c) $45 \times 9 =$ 405

b) $71 \times 3 =$ 213

d) $52 \times 5 =$ 260

e) $29 \times 8 =$ 232

f) $17 \times 4 =$ 68

Class 4 is selling tickets for a play.

Tickets cost £5 per person.

56 tickets have been sold so far.

How much money has Class 4 collected?

$£280$

Rosie buys 8 bunches of flowers. Each bunch has 17 flowers.
How many flowers does she have altogether?

136

Multiply 3-digits by 1-digit



- 1 Filip uses a place value chart to help him multiply a 3-digit number by a 1-digit number:

Hundreds	Tens	Ones
100	20	10
100	20	10
100	20	10

- a) What multiplication is Filip working out?

$$\boxed{124} \times \boxed{3}$$

- b) What is the answer to Filip's multiplication?

$$\boxed{372}$$

- 2 Use place value counters to complete the multiplications.

a) $3 \times 213 = \boxed{639}$

d) $6 \times 106 = \boxed{636}$

b) $4 \times 216 = \boxed{864}$

e) $4 \times 209 = \boxed{836}$

d) $5 \times 106 = \boxed{530}$

f) $317 \times 3 = \boxed{951}$



- 3 Complete the multiplication.

Use the place value chart to help you.

H	T	O
100	20	10
100	20	10
100	20	10

H	T	O
2	1	5
x		
6	4	5
		1

- 4 Complete the multiplications.

a)

H	T	O
2	1	7
x		
8	6	8
		2

d)

H	T	O
1	0	8
x		
6	6	8
		6

b)

H	T	O
4	3	9
x		
8	7	8
		1

d) 163×5

H	T	O
1	6	3
x		
8	1	5
		5



e) 3×240

			H	T	0
			2	4	0
			<u>7</u>	2	0
			1		

f) 7×131

			H	T	0
			1	3	1
			<u>9</u>	1	7
			7		

- 5 A lorry driver travels 156 km per day. How many kilometres will the lorry driver have travelled after 3 days?

468 km

- 6 Ron and Teddy are working out 5×245



I know the answer will be greater than 1,000 because I know 5×200 is 1,000

Ron

I know the answer should end in 5 because I know 5×5 is 25



Teddy

d) Who is correct? Circle your answer.

Ron

Teddy

both

neither

- b) Use a written method to work out 5×245

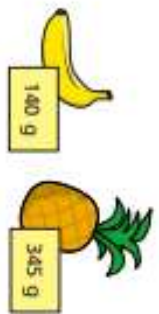
1225

- 7 There are 7 year groups in a school. There are 112 children in each year group. How many children are there in the whole school?

784

- 8 A banana weighs 140 g

- A pineapple weighs 345 g



Bag A contains 8 bananas and bag B contains 3 pineapples. Which bag weighs more and by how much? Show your working.

Bag A weighs 85 g more than bag B.