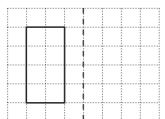
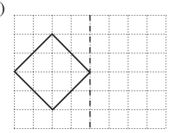


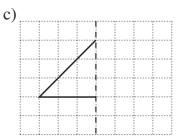
Draw the mirror image of each shape.

a)

b)









Colour the unit squares using only 3 colours. Do not use the same colour for adjoining unit squares. Make every large square different.









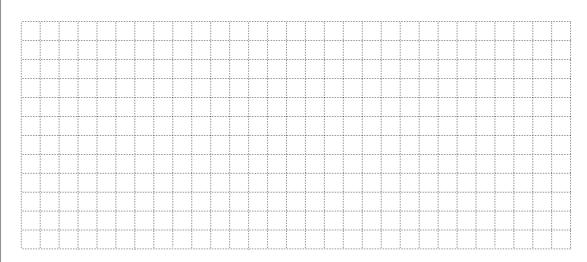


If a pattern is symmetrical, then draw in the mirror line(s).

2

Draw a line around 5 unit squares in different ways.

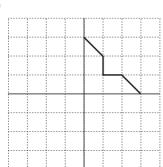
If a shape is **symmetrical**, draw in any mirror lines.



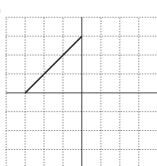
3

Reflect the shape in one **axis** first. Then reflect the shape and its mirror image in the other **axis**. Draw the mirror lines of the whole shape.

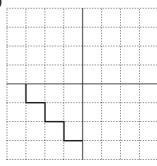
a)



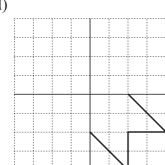
b)



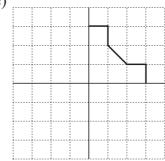
c)



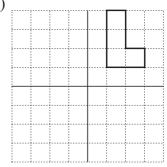
d)



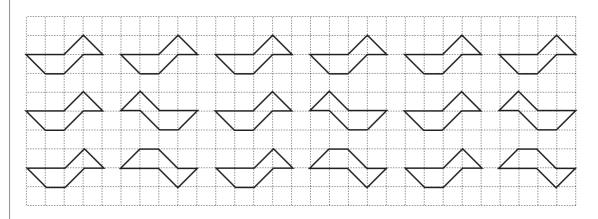
e)



f)

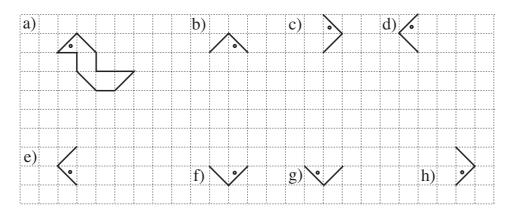


Colour the row in which the ducks are mirror images of each other.



2

Complete the drawings so that each duck is exactly the same as the first duck.



Join up the pairs which are mirror images of each other.

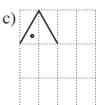


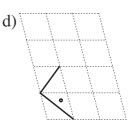
3

Draw the duck on these grids.



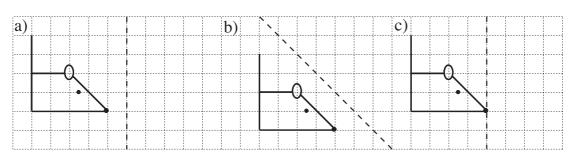






4

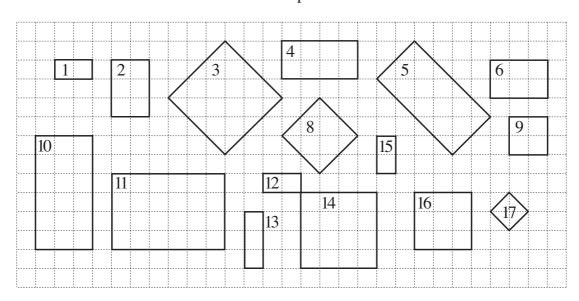
Draw the mirror image of the mouse.



Colour in the same colour shapes which are similar to

- i) rectangle 1
- ii) rectangle 2
- iii) rectangle 3.

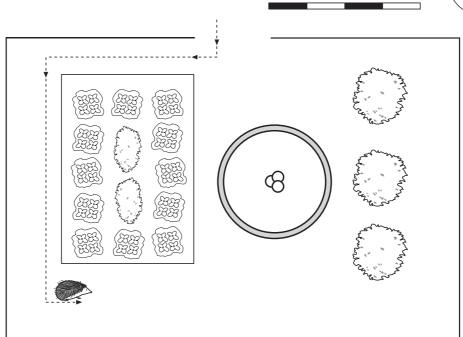
Use a different colour for each set of shapes.



2

This is a plan of a garden. *Scale*: 1 cm represents 1 m in real life.





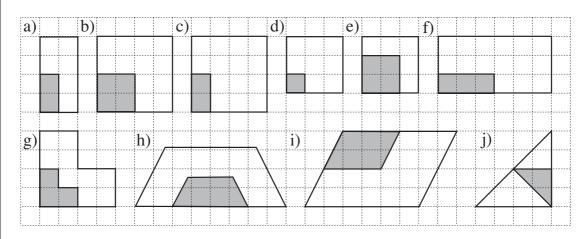
- a) In which direction does the entrance face?
- b) In real life, what is the:
- i) length of the garden,

ii) width of the garden?

W =	
-----	--

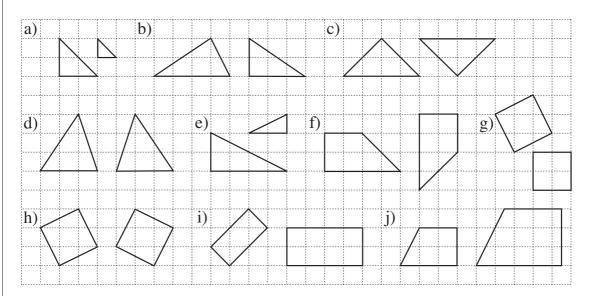
c) The broken line shows *Hedgehog*'s route. Draw where he goes next if he walks 9 m East, then 6.5 m North, then 4.5 m West, then 1 m North.

Colour any large shape which is **similar** to the small shaded shape inside it.



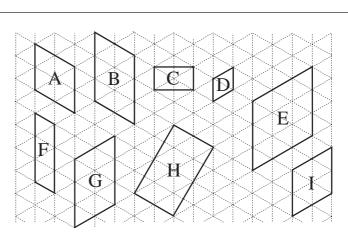
2

Colour similar shapes in the same colour.

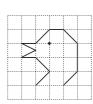


3

- a) Write the letters of similar shapes below.
- b) Draw over **parallel** lines in the same colour.
- c) Mark **right angles** with *red* squares.

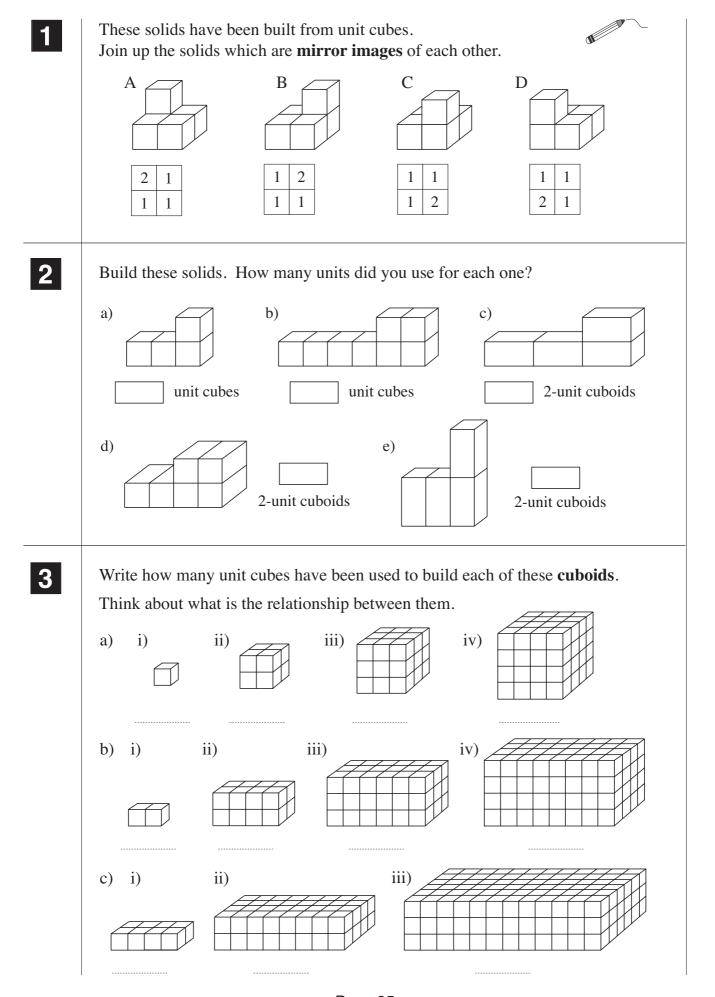


4



- a) Copy this bird's head in your exercise books.
- b) Enlarge it to 2 times and 3 times its size.

1	Thi	a nicture is a smaller conv. of a larger nicture
•		s picture is a smaller copy of a larger picture.  le: 1 mm on the copy means 1 cm on the real picture.
	a)	By how much was the real picture reduced?
	b)	How long were the sides of the real picture?
		and
	c)	How long is the perimeter of this copy?
	d)	What length of wood would be needed to make a frame for the real picture?
2	Thi	s is an enlarged copy of the front cover of a tiny book.
		Draw the real book cover if the smaller side is 2 cm long.  **  **  **  **  **  **  **  **  **
	Wh	at is the length of the larger side of the real book?
3		s is the ground plan of a room.  le: 1 mm on the plan means 10 cm in real life.  In the plan, measure the  i) width of the room:  ii) length of the room:
	b)	In <b>real life</b> :
		i) what is the width of the door?
		ii) what is the width of each window?
		iii) what length of wood would be needed to make the skirting board around the bottom of the walls?



Page 95

1	Wri	te as many 3	-digit numbers a	s you can from the	numbers	2, 3, 5 and	7.
2	a)	Build solid	ls from unit cube	s to match each of	these gro	und plans.	
		i) 1 2 1 2 1 2	3 3 3	3 2 1 2 2 1 1 1 1 1	iii)	2     1     2       2     2     1       1     1     1	_
	b)	How many	unit cubes are n	eeded to build eac	h solid?		
		i)	• • • • • • • • • • • • • • • • • • • •	ii)	iii)	)	
	c)	Which soli	d is <b>symmetrica</b>	l? Draw the <b>line</b> of	of symme	<b>try</b> (mirror	line).
3	a)		solid from 6 uni a ground plan.	t cubes. She drew	how it lo	oks from al	oove
		Draw in th	e grid what Rita's	s solid would look	like from	the front a	nd side.
		Top view	Ground plan	Front view		Side view	
			2 2 1 1				
	b)	Build solid	ls from 6 unit cul	oes to match the vi	ews from	the top.	
	,			aw the front and si		-	
		Top view	Ground plan	Front view		Side view	
	i)						
	ii)						
	iii)						

1	Draw a <i>red</i> line around the rectangles which have 1 half shaded.
	Draw a <i>blue</i> line around the rectangles which have 1 third shaded.  Draw a <i>green</i> line around the rectangle which has 1 quarter shaded.
	a) b) c) d)
	e)
2	a) Anna invited 5 friends to her birthday party. She cut her cake into 6 equal pieces. What part of the cake did each child get?
	b) How was the block of ice-cream divided up if each person at the table got 1 seventh of it?
	c) This is how <i>Mrs Mouse</i> cut up the cheese to give to her 8 children. Did they each get 1 eighth of the cheese?
3	Colour the parts of the shapes given.
	a) b) c) d) e) d) 4 eighths 3 quarters 1 half 3 eighths 1 third
4	A strip of paper is 1 unit long. What is the value of each shaded part?
	a) 1 unit
	b)
	c) d)
	e)
	f)
	g)

	b)	e) f)
This rectan	ngle is 1 unit:	
a)	1 half	1 sixth
c)	1 quarter	l) 1 third
e)	2 halves	) 1 twelfth
g)	h	0
0/	5 sixths	5 twelfths
		5 twelfths
	5 sixths	5 twelfths
A line is 1	5 sixths  unit long. Measure and colour  1 half  1 third	5 twelfths  over these parts of the line.
A line is 1	5 sixths  unit long. Measure and colour  1 half  1 third  1 sixth	5 twelfths  over these parts of the line.  2 halves
A line is 1  a) ⊢—  b) ⊢—	5 sixths  unit long. Measure and colour  1 half  1 third	5 twelfths  over these parts of the line.  2 halves  2 thirds

Dra	w a line around:		a) 1 third
a)	1 half	b) 1 quarter	c) 1 third
\$	P\$\$\$\$\$\$\$\$\$		
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	***************************************		
\$6	***************************************		
\$6	***************************************		
Fill	in the missing numbers	s. If 1 unit is	, what are these parts?
a)			
	half	halves	halves
	II III II	latives	narves
b)			
	third thi	irds thirds	thirds
c)			
	quarter quarte	ers quarters	quarters quarters
d)			
	sixth sixtl	hs sixths	sixths sixths
			SIAUIS
			Colour:
	sixths	sixths	<ul><li> red the shapes = 1</li><li> green the shapes &gt; 1</li></ul>
			green the shapes > 1
Dra	w the whole unit if this	is:	
a)	1 half		
b)	'		
	1 quarter		
(c)	1 fifth		
d)		4	
"	1 third		

1	If this solid is 1 unit: , what part of a unit are these solids?
	a) b) c)
	d) e) f) g)
2	Only the minute hand is on the clock. What part of an hour does it show?  a)  b)  c)  g  d)  g  d  g
	20 minutes 5 minutes 12 minutes 60 minutes 45 minutes  hour hour hour hour hour
3	Fill in the missing numbers.  a) 2 fifths +
4	Fill in the missing numbers.  a) half a metre = cm

41	
ш	
Ш	

Write in the missing sign to make the statement correct. Check on the grids.

		3	4	9			
<i>C</i> :	+	5	7	2			

	,	,	 ,	,	,	,	,	
	i	i	i	i	i		i	
	:	:	:	:	:		:	
	i		 				i	
	,	,	 ,					
		1						
~								
Z 1 .								
	:	:	:	:	:		:	
		i						
<b>~</b> .	i	i	i	i			i	
			 	4				
		1						
		!						
		!	!	!			!	
	:	:	:	:	:		:	
		i	i				i	



Write as many different 3-digit numbers as you can from these numbers, using each digit only once.

a)	7, 8 and 9	
$a_j$	1, o and 9	• • • • • • • • • • • • • • • • • • • •

b)	3, 4, 5 and 6	

•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	 •	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	 •	• •	•	•	•	
•	•	•		•	•	•	•		•	•						 				•	•	•				•	•			•		•		•			•					•		•			•	•	•							

Write these numbers in the correct place in the diagrams.

0, 4, 13, 30, 72, 95, 100, 321, 679, 1000, 1006, 1027, 2000

Even	Odd
	Even

b)	Whole tens	Not whole tens

c)	3-digit	Not 3-digit

d)	Whole hundreds	Not whole hundreds

Which numbers can be written instead of the shapes?

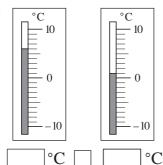
a) 
$$440 - 10 \times$$
 =  $315 + 45$  b)  $726 - 571 +$  >  $161$ 

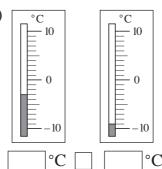
b) 
$$726 - 571 + \bigcirc > 161$$

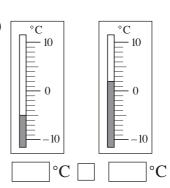
1	Tick th	ne operations which answer the problem and then do the calculations.
		ad a £10 note and 22 p. He spent £2.56, then his sister gave him 35 p. nuch money does Lee have now?
	In pen	ce: $1022 + 256 - 35 = \dots$
		$1022 - 256 - 35 = \dots$
		$1022 - 256 + 35 = \dots$
		$1022 + 256 + 35 = \dots$
		$1022 - (256 - 35) = \dots$
2	Hetty I	a plan, do the calculation and write the answer in a sentence.  Hedgehog had 347 apple pips. She got 172 orange pips from her Mum. she swapped 268 apple pips for grape pips with a friend.  nany pips does Hetty Hedgehog have now?
		C:
3		A 2 litre bottle was full of water. We poured out 35 cl of water. How much water is left in the bottle?
		A 2 litre bottle contained 35 cl of water. We poured in another 35 cl of water. How much water is in the bottle now?
	· ·	A 2 litre bottle contained 36 cl of water. We poured out 10 cl 9 ml of water. How much water is left in the bottle?
4	Last A	pril, it rained on 3 fifths of the days.  April  Sun 1 8 15 22 29
	a) (	On how many days did it rain?  Mon $29162330$ Tue $3101724$
	b) I	Wed       4       11       18       25         Thu       5       12       19       26
	$\begin{vmatrix} c \end{vmatrix}$	What part of April was dry?

Write the temperature below the thermometers. Write in the missing sign.

a)



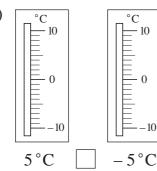


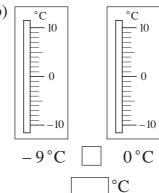


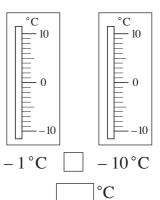
2

Mark the temperatures on the thermometers. Which is higher and by how much?

a)







3

How much does each child have?

°C

Who has more? Write in the missing sign.

- means £1 in cash
- means £1 in debt

a) Ann

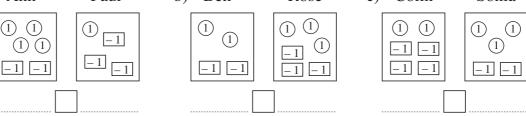
Paul

b) Ben

Rose



Sonia



Complete the drawings to make the statements correct.

- Alice's balance is -£6: 1 1 -1 -1 -1 -1 -1a)
- Barry's balance is b) £3: (1)(1)(1) -1 -1
- Carol's balance is (1)(1)(1)(1)-1(-1)-1c) £0:
- Dan's balance is -£4: (1) (1) d)
- £5: (1) (1) (1) (1) (1) Eve's balance is e)

Join up the fruit to the corresponding point on the number line.



 $\begin{pmatrix} 7 \end{pmatrix}$ 













-15 -10 -5 0 5 10 15

2

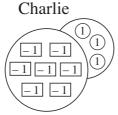
How much money does each child really have? Write the amounts in increasing order.

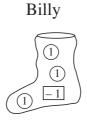
1 means £1 in cash

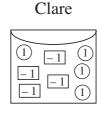
-1 means £1 in debt

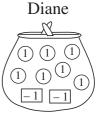
Lisa

1 1
-1 -1
-1 -1









3

Draw two different ways of showing these amounts. Use (1) and [-1]

a) 
$$-£3 = \boxed{\phantom{0}}$$

4

Wendy went to Austria for a winter holiday. One day, she decided to note down the outside temperature every hour. She made this table to show her data.

Time (hours)	7	8	9	10	11	12	13	14	15	16	17	18	19	
Temperature (°C)	- 9	- 10	-6	- 2	0	3	6	8	9	7	4	- 1	- 3	

- a) When was it: i) coldest ..... ii) warmest? .....
- b) Write the temperatures in increasing order.

.....

How much is in the picture? Fill in the missing numbers. (50) (50) (50) (50) (50)(50)(50)50 50 50 50 (50)50 50 50 50 50 50 50 (50) (50) (50) (50) (50) What is  $30 \times 50$ ? ..... Write additions and multiplications about the pictures. (1) (1) (1) (1) b) (10) (10) (10) (100)(100)(100)a) ① ① ① ① (10) (10) (10) (10)(100) (100)(100) $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$ (10) (10) (10) (10)(100)(100)Three brothers were each left 257 dollars in their American uncle's will. How much did their uncle leave them in total? Fill in the missing numbers. A:  $\bigcirc$  2 100 100 50 B: 100 100 50 (5) (2) 100 100 C: 50 (5) (2) + 3 × Write the results. Underline the operation which is impossible.  $3 \times 0 =$  $30 \div 3 =$  $8 \times 3 =$  $16 \div 2 =$  $5 \times 3 =$  $24 \div 4 =$  $4 \times 5 =$  $15 \div 5 =$  $8 \times 6 =$  $20 \div 5 =$ 

 $9 \times 8 =$ 

 $4 \times 3 =$ 

 $10 \div 0 =$ 

 $24 \div 8 =$ 

 $6 \times 4 =$ 

 $54 \div 9 =$ 

 $14 \div 2 =$ 

 $20 \div 2 =$ 

 $10 \times 9 =$ 

1	Fill in the missing	numbers.			
	a) 4 × = 1	2	÷ 4 = 7	$\times 5 = 40$	45 ÷ = 9
	b) 3 × = 2	24	÷ 6 = 3	$\times 7 = 0$	28 ÷ = 4
	c) 5 × = 3	35	÷ 3 = 5	× 8 = 16	6 ÷ = 3
	d) $6 \times \square = 4$	18	÷ 5 = 6	$\times 9 = 9$	2 ÷ = 2
	e) $9 \times \square = 7$	12.	÷ 8 = 4	$\times$ 6 = 54	63 ÷ = 7
	, , , , , , , , , , , , , , , , , , ,				
2	Write additions ar	nd multiplication	ns about the pic	tures.	
	a) 2 2 2	b) (20)	20 20	c) (200) (200	(200)
	2 2 2	20		(200) $(200)$	(200)
	2 2 2	20		(200) $(200)$	
			,		
3	Fill in the missing	products. Note	e how they char	ige.	
	a) $5 \times 3 =$	$50 \times 3 =$	$5 \times 30 =$	$5 \times 300 =$	$50 \times 30 =$
	b) $8 \times 2 =$	$80 \times 2 =$	$8 \times 20 =$	8 × 200 =	$80 \times 20 =$
	c) $3 \times 3 =$	$30 \times 3 =$	$3 \times 30 =$	$3 \times 300 =$	$30 \times 30 =$
	d) $4 \times 5 =$	$40 \times 5 =$	$4 \times 50 =$	$4 \times 500 =$	$40 \times 50 =$
4	How many pennie	es does each per	rson have? Calo	culate in differen	t ways.
	John	Katy	Lorna	a M	ichael
	10 2	100 20	50 2	① (500)	20 (10)
	10 2	(100) (20)	50 2	$\bigcirc \bigcirc$	(20) (10)
	10 2	100 20	50 2	① (500)	(20) $(10)$
	(10) (2)	(100) (20)			
	John:				
	Katy:				
	Lorna:				

Michael: ....

1	Fill in the missing products.
	a) $6 \times 10 = $ b) $5 \times 10 = $ c) $30 \times 3 = $
	$6 \times 4 = \boxed{ 5 \times 7 = \boxed{ 5 \times 3 = }$
	6 × 14 = 5 × 17 = 35 × 3 =
2	Fill in the missing products.
	a) $3 \times 24 = $ b) $6 \times 12 = $ c) $3 \times 12 = $
	3 × 240 =
3	Estimate the product $(P)$ . Is the estimate more or less than the exact product?
	a) $227 \times 4$ i) Rounding 227 to the nearest hundred:
	$P \approx                                   $
	ii) Rounding 227 to the nearest ten:
	$P \approx                                   $
	b) 468 × 6 i) Rounding 468 to the nearest hundred:
	$P \approx \square \times 6 = \square P \square$
	ii) Rounding 468 to the nearest ten:
	$P \approx \square \times 6 = \square$
4	Estimate the product by rounding to the nearest ten.
	a) $162 \times 5 \approx$ $\times 5 =$ $162 \times 5$
	b) 177 × 4 ≈
	c) 315 × 3 ≈
	d) 231 × 4 ≈
5	In your exercise book, estimate, calculate and check the answer. Write it below. Grandpa gave £1.35 to each of his 4 grandchildren. How much did he give them altogether?

Write a plan, estima	to the answer	to the heares	st 10 p, then	
Ribbon costs £2.54 How much do 3 me	_	(£1) (£1) (2) (50) (2)	£1) £1) 2) 50) 2)	£1) £1) 2) 50) 2)
Plan:				
T				
Calculation:				
4				
mswer			• • • • • • • • • •	
Estimate the result i	n your head f	rst, then do	the calculation	on.
a) $32 \times 30 =$	24 × 20	= 16	× 50 =	38 × 20 =
$14 \times 60 =$	$17 \times 50$	= 13	× 70 =	21 × 40 =
$56 \times 30 =$	$40 \times 37$	= 89	× 20 =	$50 \times 34 =$
100				×
		+		×
Answer:		+		×
Answer:  Think about what the	ne diagram me		the missing r	
	ne diagram me		the missing r	
			the missing region $73 \times 3$	numbers.
		eans. Fill in t		numbers.
		eans. Fill in t	73 × 3	numbers.
		eans. Fill in t	73 × 3	numbers.

-	7	

Fill in the missing products. Note how they change.

a) 
$$60 \times 3 = \boxed{}$$

$$40 \times 10 =$$

$$40 \times 15 =$$

$$40 \times 25 =$$

c) 
$$4 \times 2 =$$

$$40 \times 2 =$$

$$400 \times 2 =$$

d) 
$$3 \times 5 =$$

$$30 \times 5 =$$

$$300 \times 5 =$$

$$30 \times 50 =$$

e) 
$$4 \times 24 = \boxed{}$$

$$16 \times 60 =$$

$$2 \times 480 =$$

## 2

Fill in the missing products.

a) 
$$5 \times 100 =$$

$$4 \times 3 =$$

c) 
$$7 \times 8 =$$

$$5 \times 20 =$$

$$30 \times 3 =$$

$$7 \times 30 =$$

$$200 \times 3 =$$

$$7 \times 100 =$$

$$5 \times 121 =$$

$$234 \times 3 =$$

d)

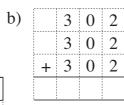
$$7 \times 138 =$$

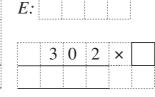
3

Estimate first, then calculate using addition and multiplication.

a) 2 0 2 2 0 2 2 0 2 + 2 0 2

L.	1				
	-	)   (	2	- V	





c)

	4	2	3
+	4	2	3

E: 4 2 3 ×

	2	0	1
	2	0	1
	2	0	1
	2	0	1
+	2	0	1

 2	0	1	×	

*E*:

4

a) Kate bought 3 chocolate bars at 82 pence each. How much did she pay altogether?

Th	Н	Т	U		
		8	2	×	

Th	Н	T	U		
				×	

1	Esti	mate first, then complete	the addition and mu	ultiplication.
•	a)	7 1 E:	b) <i>I</i>	E:
		7 1 7 1 7 1 7 1 7 1	······································	2 0 1 2 0 1 2 0 1 + 2 0 1 2 0 1 ×
			d) E	E:
	c)	E:    5   3   4	2 2 2 2 2 + 2	2 1 1 2 1 1 2 1 1
2	Esti	mate first, then do the m	ultiplications.	
	a)	E:	E:	E:
		4 2 2 × 2	4 2 2 × 3	4 2 2 × 4
	b)	E:	E:	E:
		3 2 1 × 3	4 2 1 × 3	6 2 1 × 3
	c)	E:	<i>E</i> :	E:
		8 4 × 2	8 0 4 × 2	4 0 2 × 4
3	a)	Each flower on an appl How many petals are o		Th H T U flowers?
		Answer:		
	b)	Workmen laid 106 m o	f pavement a day fro	om Monday Th H T U

to Friday. How many metres did they lay in a week?

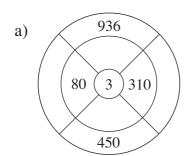
×

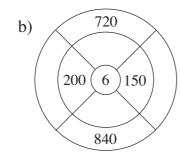
Complete the table.

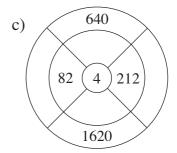
(Do the calculations in your exercise books if you need to.)

а	b	С	$a \times c$	$a \times b$	$b \times c$
400	5	3			
450	6	4			

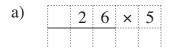
**2** Fill in the missing numbers.



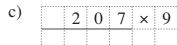


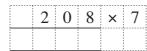


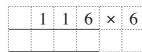
3 Calculate the products.





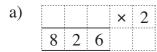






	4	0	7	×	3
			!		

Fill in the missing factors.



			×	3
9	6	3		

1	0	6	×	
6	3	6		

1							2			/	$\setminus$
	a)		many triang				.gram?		• •		$\rightarrow$
	b)	How	many triang								<u> </u>
		i)	51 of these	diagram	1S	ii)	102 o	f these	diagr	ams?	
			Answer:				Answe	er:			
2	a) b)		many circle many circle								· · ·
		i)	72 teddy be	ar heads	S	ii)	105 te	ddy be	ear he	ads?	
			Answer:				Answe	er:			
3	The	re are	24 hours in 1	l day. F	How many h	ours a	re there	e in			
	a)	1 we	eek		1	o) 4	weeks	?			
	1 w	eek =	days =	=	hrs	4 week	s =		days	=	hrs
4	Is it	possi	ble to answer	the que	estions with	the da	ta give	n? Co	lour [	Yes	or No
	a)		r goes at a st at distance do				5 m in	1 minu	ite.	Yes	No
	b)		y weighed he t is the total		_		29 kg.			Yes	No
	c)		le Andrew pu used 9 fence p	•	•	•		e apar	t.	Yes	No
	d)	A cei	ntipede has 478	8 legs. H	Iow many leg	gs do 3	centipe	des have	e?	Yes	No
5			s steadily at		Time (seconds)	1	2	5	0	4	10
		_	the table.		Distance (mm)	217					

Page 112