1

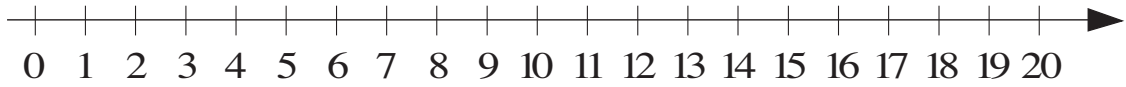0 1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

a) starts from 0 and jumps 2 units at a time.
Mark in blue the places he lands on and write the numbers underneath.

b) starts from 1 and jumps 2 units at a time.
Mark in red the places he lands on and write the numbers underneath.
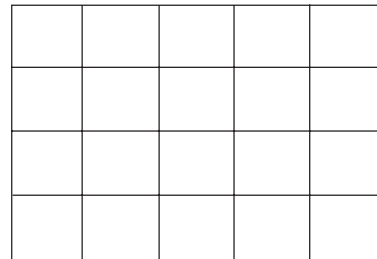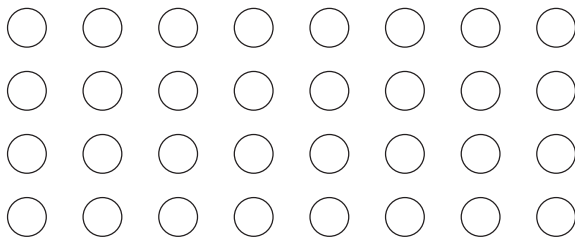
2

Write the Arabic numbers under the Roman numerals.

I   II   III   IV   VI   VII   VIII   IX   X

3

Colour the circles, some red and some green and write equations about it.

4

Kay and Glyn collected 11 leaves altogether.

K

G

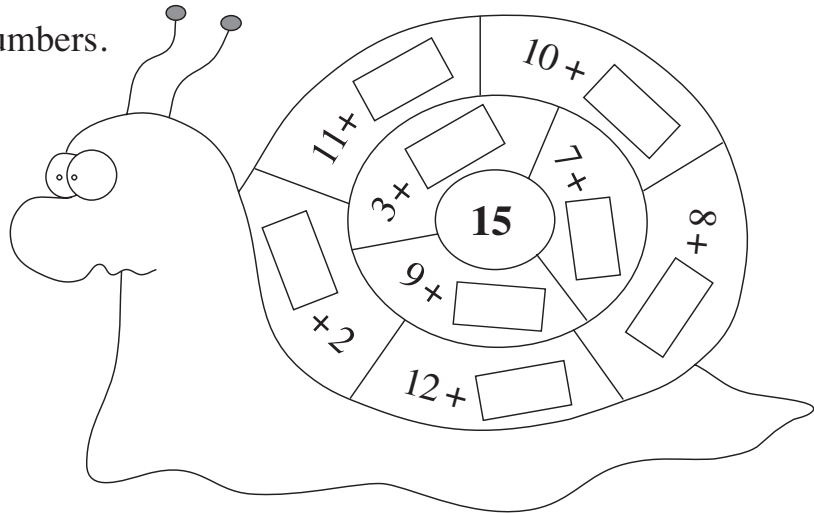Fill in the table to show how many leaves they could each have collected.

5

a)   **9**

4 + ☐
6 + ☐
☐ + 7
☐ + 9
☐ + 8

b)   **12**

6 + ☐
4 + ☐
3 + ☐
☐ + 10
☐ + 7

c)   **15**

7 + ☐
9 + ☐
☐ + 10
13 + ☐
☐ + 11

1 Fill in the missing numbers.

2 Paul has 9 books. Julie has 6 more.
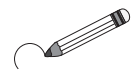How many books does Julie have?

3 David has 10 toy cars, some red and some blue.

a) How many red and how
many blue cars could he
have? Complete the table.

R
B

b) If David has 2 more red cars than blue cars, draw around the
column in the table which is correct.

4 Write down the Roman numerals from 1 to 10.

5 Share the marbles **equally** between 2 children. Complete the table.

Marbles	4	5			8	9				13		15	16		18	19	
Per child			3	3			5	5	6		7			8			10
Left over			0	1			0	1	0		0			1			0

6 Little Red Riding Hood collected 17 mushrooms.
She gave 8 of them to her Grandmother.
How many did she take home for her Mother?

1   Measure the lengths of the two line segments, A and B.

A   B

Segment A: ☐ cm   *Segment B*: ☐ cm

Total length of the line: ☐☐ cm

Write an addition and subtraction about it.

☐☐☐☐☐☐

☐☐ – ☐☐☐

2   At a party, a 10 litre jug of lemonade was placed on each of 3 tables.

This was how much lemonade was left in the jugs after the party.

a)   How much lemonade was drunk? Fill in the missing numbers.

A   B   C

3 litres   8 litres   5 litres
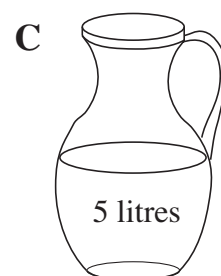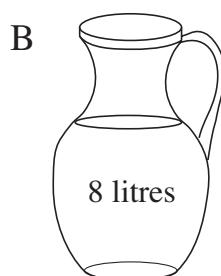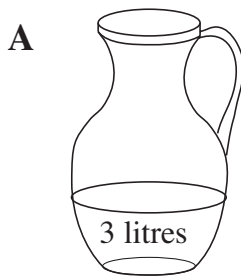
Jug A: ☐☐ litres – ☐ litres = 3 litres

Jug B: ☐☐ litres – ☐ litres = 8 litres

Jug C: ☐☐ litres – ☐ litres = 5 litres

b)   How much lemonade was drunk altogether?   litres

3   Mum bought 20 kg of potatoes. She has already used 12 kg.
How many kg of potatoes has she left?

☐☐☐☐☐☐☐ kg

<div>

1 Colour the shapes in different ways using blue, green and red.
No **adjacent** colours should be the same.

</div>

<div>

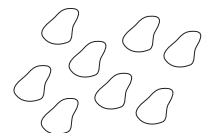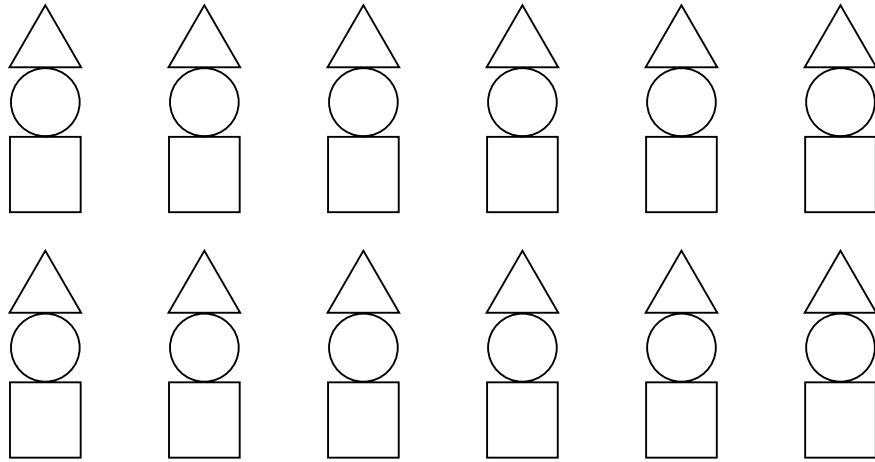**2** Draw the different ways you could order these 4 shapes.

</div>

<div>

3 The children in a class were asked, "Which is your favourite of these fruits?"

Tally

apple ┃┃┃

cherry ┃┃

banana ╫╫╫ ┃

pear ┃┃┃
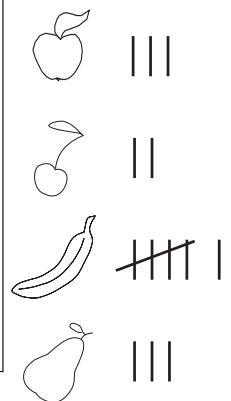
a) Draw in the box the fruit chosen by each child.

b) How many children were in the class? . . . .

c) What was the most popular of these fruits? . . . .

d) What was the least popular fruit? . . . .

</div>
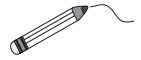
1 Join up half the number of shapes to A and half to B.
Fill in the missing numbers.

a)

A   B

□ is half of □

b)

A   B

□ is half of □ □

2 The shop assistant is counting shoes. Complete the table to help her.

Pairs	1	2			5	6	7		9		11		13	
Shoes	2		6	8				16		20		24		28

3 Measure the length of each line. Draw over half of it in red.

a) _____   b) _____

Half of □ cm = □ cm   Half of □ cm = □ cm

4 Measure the length of each line. Extend it to 2 times its length.

a) _____

2 times □ cm = □ □ cm

b) _____

2 times □ cm = □ □ cm

5 Ann always gets half the money that Bob gets. Complete the table.

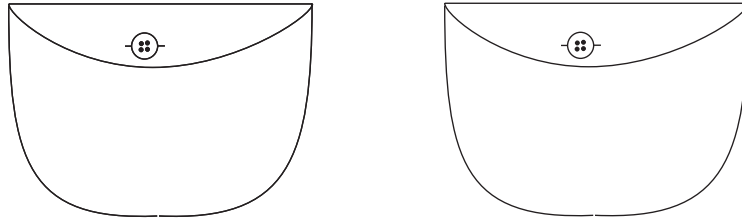| B	2			8		12	14	16		20		24	
A		2	3		5				9		11		5

1 I have £30 in one of my pockets and £20 in my other pocket. I have only £10 notes.

a) Draw the money in my pockets.

b) How much do I have altogether?

2 Write these numbers in **increasing** order. Circle the even numbers.

62   24   70   58   13   94   47

. . . .
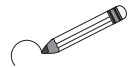
3 Join up the labels to the corresponding points on the number line.
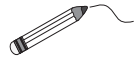
2 tens + 5 units   1 ten + 9 units   3 tens + 6 units   8 tens + 2 units

0   5   10   15   20   25   30   35   40   45   50   55   60   65   70   75   80   85   90   95   100   105   110
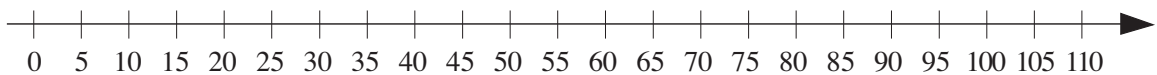
3 tens + 1 unit   5 tens + 6 units   7 tens + 2 units   9 tens + 6 units

4 Draw arrows towards the box which has more.
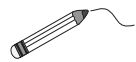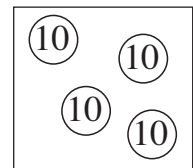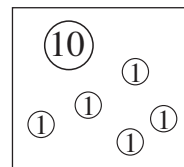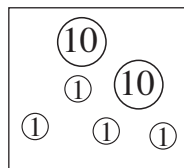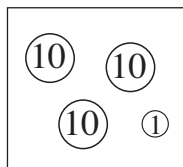
5 Complete the table.

Roman	X	XX		X L	L	L X			XC	C
Arabic	10		30			70	80			

1   Bunny starts at 0 and jumps 10 units at a time along the number line.

a)   Write the numbers he lands on below the number line.
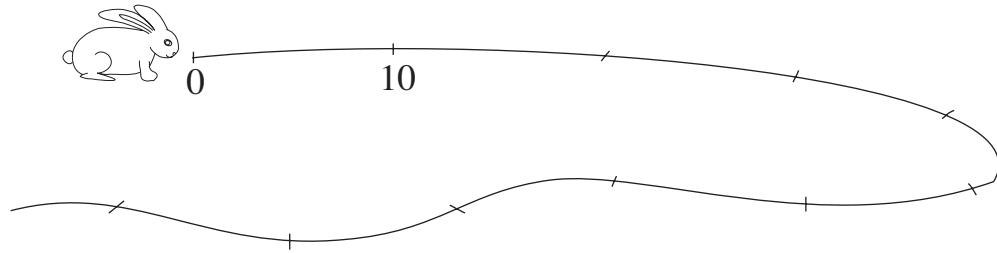
b)   Complete the table.

Number of jumps	1	5	3			7	10		0	8	
Number reached	10			40	90			20			60

2   Fill in the missing numbers.

a) $10 + 10 =$ ☐   b) $30 + 10 =$ ☐   c) $50 + 10 =$ ☐

     $15 + 10 =$ ☐ $35 + 10 =$ ☐ $55 + 10 =$ ☐

     $20 + 10 =$ ☐ $40 + 10 =$ ☐ $60 + 10 =$ ☐

     $25 + 10 =$ ☐ $45 + 10 =$ ☐ $65 + 10 =$ ☐

3   There are 5 marbles in each box. Complete the table.

Boxes	1	2	3	4	5	6	7	8	9	10	11
Marbles	5										

M = ☐ times B   B = ... of M

4   Fill in the missing numbers.

a) $10 - 5 =$ ☐   b) $30 - 5 =$ ☐   c) $50 - 5 =$ ☐

     $15 - 5 =$ ☐ $35 - 5 =$ ☐ $55 - 5 =$ ☐

     $20 - 5 =$ ☐ $40 - 5 =$ ☐ $60 - 5 =$ ☐

     $25 - 5 =$ ☐ $45 - 5 =$ ☐ $65 - 5 =$ ☐
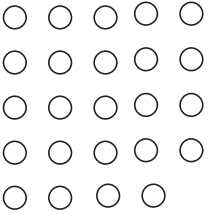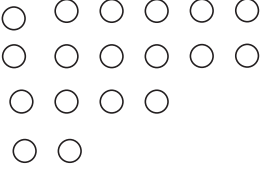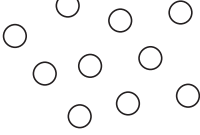
1 Fill the missing numbers.

a) 10 $<$20 ☐☐ b) ☐☐ 30$>$ 40 c) ☐☐ $<$30 80

d) 30 $<$10 ☐☐ e) ☐☐ 40$>$ 20 f) 100 40$>$ ☐☐

2 Cross out 5 coins as many times as possible. How many times can you do it? How many coins remain?

a)

b)

c)

☐ times   ☐ times   ☐ times

☐ remain   ☐ remain   ☐ remain

3 30 girls were in the playground, 10 fewer than the number of boys.

a) How many boys were there? ☐☐☐☐☐☐☐☐

b) How may children were in the playground altogether? ☐☐☐☐☐☐☐☐

4 Continue the sequences to 100.

a) 0, 10, 20, 30, ...

b) 0, 5, 10, 15, ...

. . . .

5 Write the correct sign and number on each arrow to show its meaning.

a) 20 ⟶ 10   b) 50 ⟶ 20

c) 90 ⟶ 40   d) 70 ⟶ 30

e) 40 ⟶ 35   f) 100 ⟶ 55

1 Kate has saved £40. How much money does she still have to save if she wants to buy a bicycle for £70?

Answer: . . . .

2 How much does the fruit on each plate cost, if:

= 5 p   = 20 p   = 25 p   = 30 p

a)   b)

c)   d)

a) . . . .

b) . . . .

c) . . . .

d) . . . .

e) Colour in the plate of fruit which costs the most.

3 How many different results can be found? Use + or − signs.

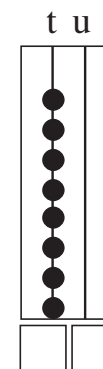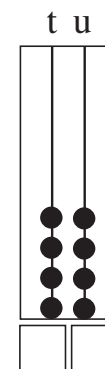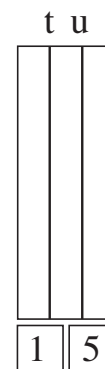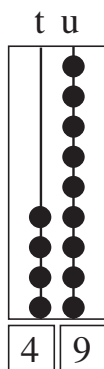40 ☐ 30 ☐ 20 = ☐☐   40 ☐ 30 ☐ 20 = ☐☐

40 ☐ 30 ☐ 20 = ☐☐   40 ☐ 30 ☐ 20 = ☐☐

4 Write in the missing numbers and complete the drawings.

t u   t u   t u   t u   t u   t u   t u

| 4 | 9 | | 9 | 4 | | 3 | 6 | | 6 | 3 | | 1 | 5 | | | | | | |

1 Complete the table. Write down the rule in different ways.

a	50	60	80	40	70									
b	2	3	9	2	6									
c	52	63	89											

Rule: . . . .

2 List the numbers which make this statement true:.

$36 <$ ⬚? $+ 30 < 50 - 10$ ⬚ : . . . .
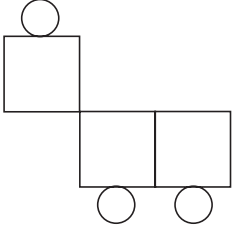
3 Decode the Roman numbers.
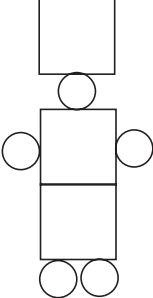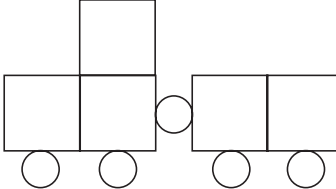
Write your own Roman numbers and decode them.

a) XIII $= 10 + 3 = 13$

b) LXIII $= 60 +$ ⬚ $=$ ⬚⬚

c) XLIII $=$ ⬚⬚ $+$ ⬚ $=$ ⬚⬚

d) XIX $= 10 + 9 =$ ⬚⬚

e) LXXIX $= 70 +$ ⬚ $=$ ⬚⬚

f) XLIX $=$ ⬚⬚ $+$ ⬚ $=$ ⬚⬚

4 Write beside each figure its total value, if ⬚ $= 10$ and ◯ $= 1$.

a)

b)

c)

b) Draw a figure which has a value of 47.

1 There were 30 red balls and 40 blue balls in the cupboard. The teacher then found another 9 green balls and put those in the cupboard too.

How many balls are there in the cupboard now?

balls

2 Write the next numbers smaller and greater than the number in the middle.

a) [ ] < 89 < [ ]   b) [ ] < 75 < [ ]

c) [ ] < 60 < [ ]   d) [ ] < 44 < [ ]

3 Write the Roman numerals below these numbers.

a)   51   b)   13   c)   100   d)   25   e) 39

4 a)   Colour blue the numbers whose digits add up to 10.
b)   Colour yellow the numbers whose digits have a difference of 3.
c)   Colour red the numbers which have both digits the same.

10		30		50		70		90	
9	11	29	31	49	51	69	71	89	91
8	12	28	32	48	52	68	72	88	92
7	13	27	33	47	53	67	73	87	93
6	14	26	34	46	54	66	74	86	94
5	15	25	35	45	55	65	75	85	95
4	16	24	36	44	56	64	76	84	96
3	17	23	37	43	57	63	77	83	97
2	18	22	38	42	58	62	78	82	98
1	19	21	39	41	59	61	79	81	99
0		20		40		60		80		100

5 The same shape means the same number.

The sum of the 4 numbers at the corners equals the middle number.

70   10   80   90   100
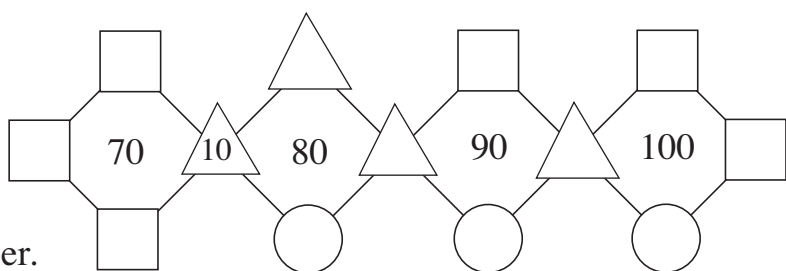
1 Fill in the missing numbers.

a) $48 \xrightarrow{+2} \boxed{} \xrightarrow{+4} \boxed{}$ $48 + 6 = \boxed{}$

b) $54 \xrightarrow{+6} \boxed{} \xrightarrow{+2} \boxed{}$ $54 + 8 = \boxed{}$

c) $74 \xrightarrow{+6} \boxed{} \xrightarrow{+3} \boxed{}$ $74 + 9 = \boxed{}$

d) $86 \xrightarrow{+4} \boxed{} \xrightarrow{+3} \boxed{}$ $86 + 7 = \boxed{}$

e) $32 \xrightarrow{+8} \boxed{} \xrightarrow{+1} \boxed{}$ $32 + 9 = \boxed{}$

2 Practise addition and subtraction.

a) $30 + \boxed{} = 80$

$\boxed{} + 40 = 100$

$37 + 20 = \boxed{}$

$\boxed{} + 2 = 96$

$\boxed{} + 42 = 92$

$14 - 6 = \boxed{}$

$15 - 7 = \boxed{}$

b) $45 - 4 = \boxed{}$

$60 - 9 = \boxed{}$

$96 - 40 = \boxed{}$

$\boxed{} = 75 - 60$

$86 - \boxed{} = 16$

$16 - 8 = \boxed{}$

$56 - 8 = \boxed{}$

c) $4 + 8 = \boxed{}$

$14 - 9 = \boxed{}$

$9 + 3 = \boxed{}$

$19 + \boxed{} = 22$

$\boxed{} + 5 = 44$

$44 - 5 = \boxed{}$

$\boxed{} - 5 = 89$

3 Fill in the missing numbers.

$37 \xrightarrow{+10} \boxed{} \xrightarrow{+7} \boxed{} \xrightarrow{-3} \boxed{} \xrightarrow{+8} \boxed{} \xrightarrow{+6} \boxed{} \xrightarrow{-9} \boxed{}$

4 Complete the subtractions.

a) $37 - 9 = 37 - 7 - 2 = \boxed{}$ b) $84 - 6 = 84 - 4 -$

c) $63 - 6 = 63 - 3 -$ d) $72 - 8 = 72 - 2 -$

e) $95 - 8 = 95 -$ f) $44 - 9 = 44 -$

g) $58 - 9 =$ h) $25 - 7 =$

1 Fill in the missing numbers.

a) $26 + 13 = 23 + \boxed{}$ b) $49 - \boxed{} = 39 + 6$

   $32 + 48 = \boxed{} - 5$ $72 - 56 = 8 + \boxed{}$

   $57 - 26 = \boxed{} - 14$ $\boxed{} - 4 = 75 + 14$

   $\boxed{} - 35 = 34 + 25$ $62 - \boxed{} = 39 + 16$

2 Join up the equal numbers.
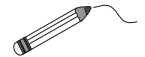
$12 + 23$		79		$47 - 22$
$55 + 11$		25		$17 + 52$
$92 - 23$		66		$100 - 21$
$47 + 32$		69		$13 + 22$

3 Practise addition and subtraction.

a) $46 + 35 = \boxed{}$ b) $57 + 26 = \boxed{}$ c) $45 + 38 = \boxed{}$
   $46 + 30 + 5$ $57 + 20 + 6$ $45 + 30 + 8$

   $46 + 35 = \boxed{}$ $57 + 26 = \boxed{}$ $45 + 38 = \boxed{}$
   $46 + 5 + 30$ $57 + 6 + 20$ $45 + 8 + 30$

d) $62 - 34 = \boxed{}$ e) $84 - 28 = \boxed{}$ f) $95 - 37 = \boxed{}$
   $62 - 30 - 4$ $84 - 20 - 8$ $95 - 30 - 7$

   $62 - 34 = \boxed{}$ $84 - 28 = \boxed{}$ $95 - 37 = \boxed{}$
   $62 - 4 - 30$ $84 - 8 - 20$ $95 - 7 - 30$

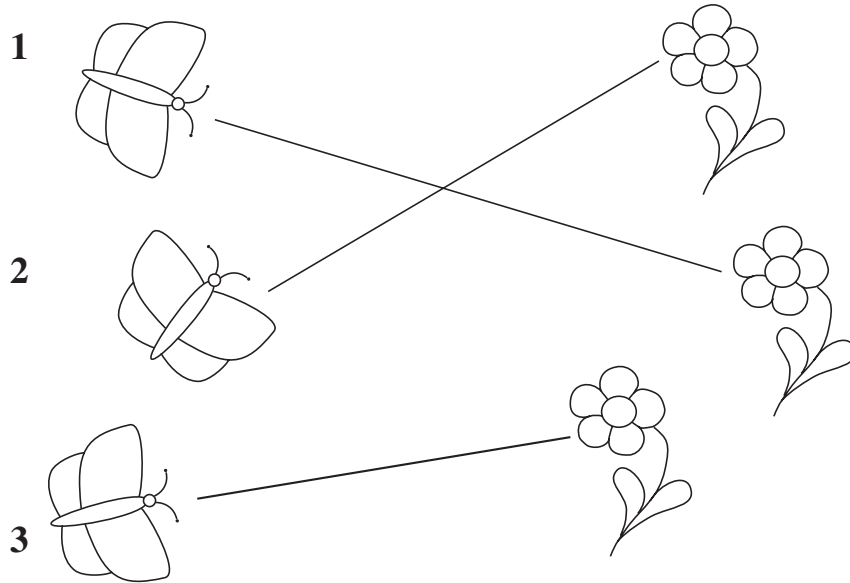**4** John has 56 stamps, 27 more than David has.

How many stamps does David have?

1　Colour the butterflies in different ways. The patterns must be **symmetrical**.
Which butterfly has the shortest distance to fly to its flower?
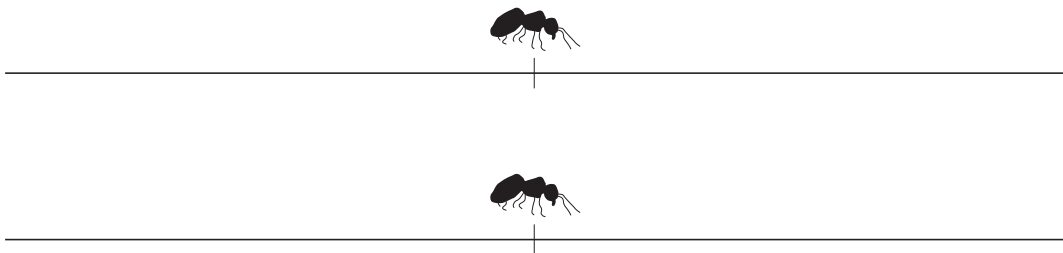Estimate first, then check by measuring.

Estimated order: ☐ ☐ ☐　　　Measured order: ☐ ☐ ☐

2　There is a flower on the path 4 cm from Ant. There is a blade of grass 2 cm from the flower. Mark on the lines and draw where they could be.

What is the:

a)　closest that the blade of grass could be to Ant?　☐ cm

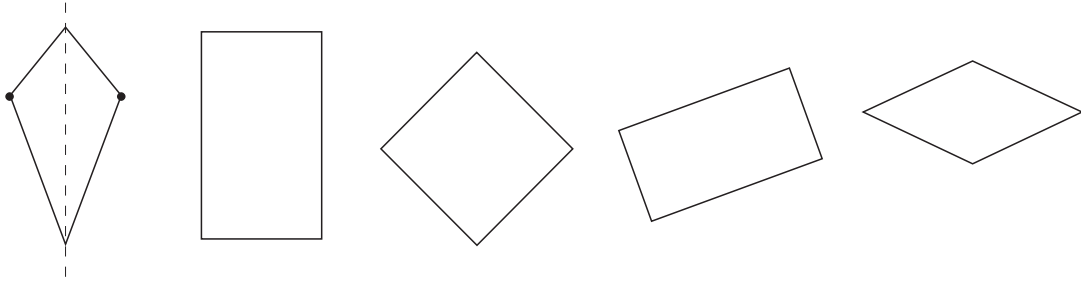b)　furthest away that the blade of grass could be from Ant?　☐ cm

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3　We cut 30 cm from a 4 m length of ribbon. What length of ribbon was left?
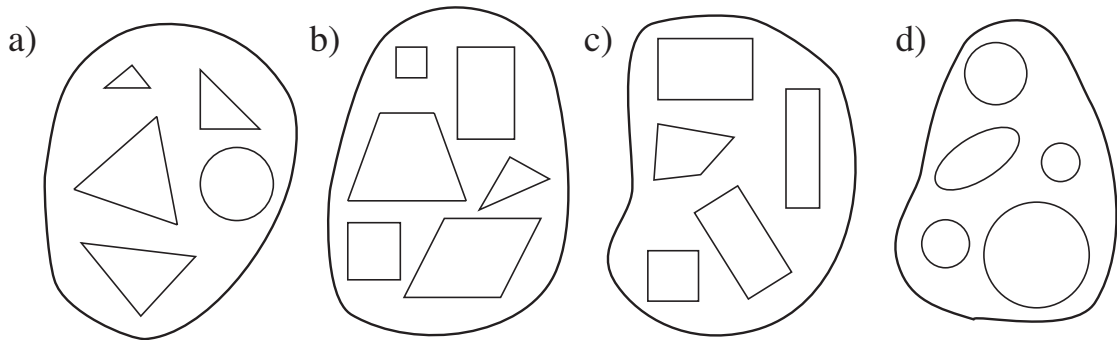
☐ m ☐☐ cm

1 Colour yellow the quadrilaterals which can be folded in half so that two **opposite** vertices meet exactly. Draw in the **fold lines**.
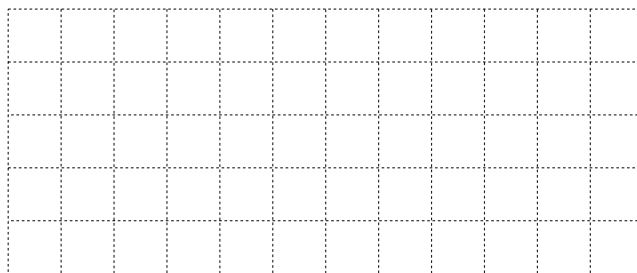

2 In each set of shapes, colour the shape which does **not** belong.

a) b) c) d)

3 You want to cover the floor of the doll's house with tiles of 3 different sizes. Each size is a different colour, red (R), blue (B) or yellow (Y).

Colour the floor to show the tiles you would use and fill in the number of tiles needed of each colour.
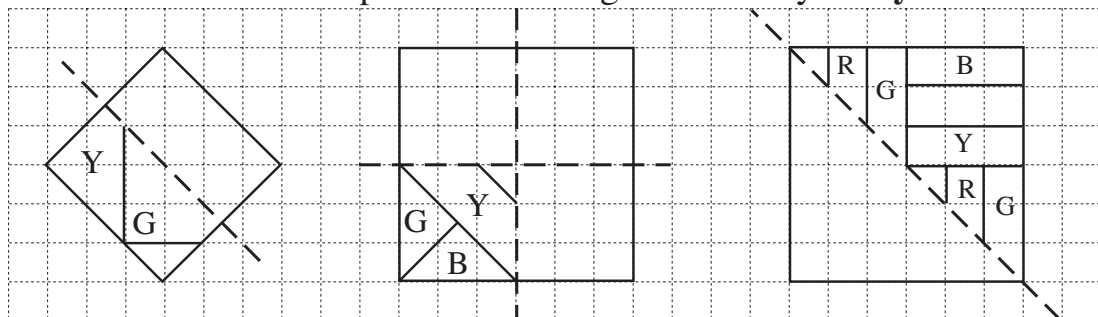
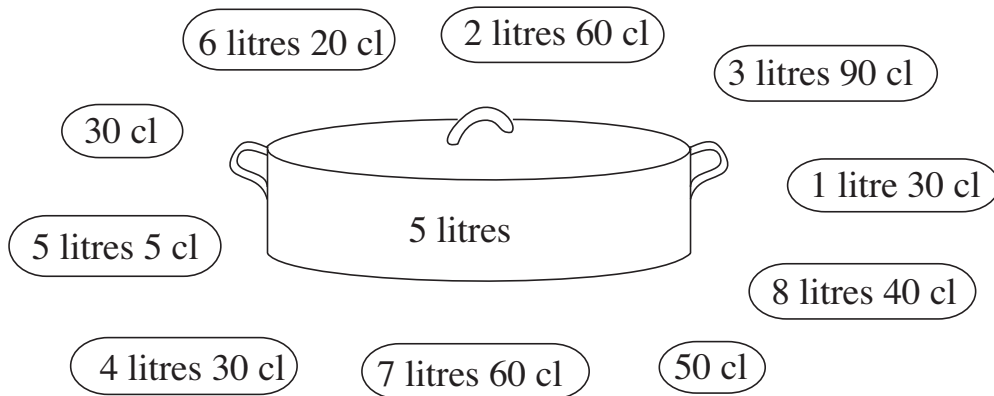*Floor of doll's house*

R :

B :

Y :

4 Colour as shown. Complete the drawings so that they are **symmetrical**.

1 Cross out the quantities which will not go into the empty 5 litre pot.

(6 litres 20 cl)   (2 litres 60 cl)

(3 litres 90 cl)

(30 cl)

(1 litre 30 cl)

5 litres

(5 litres 5 cl)

(8 litres 40 cl)

(4 litres 30 cl)   (7 litres 60 cl)   (50 cl)

2 Fill in the missing numbers and units.

a)   20 cl + 90 cl = 1 litre [ ][ ] cl

b)   6 litres – 50 cl = [ ] litres [ ][ ] cl

c)   1 litre 80 cl + [   ] = 2 litres 30 cl

d)   [   ] + 36 cl = 72 cl

e)   [   ] + 30 cl = 1 litre – 47 cl

f)   [   ] + 78 cl = 2 litres – 22 cl

g)   0 litres + [   ] = 40 cl

3 Calculate the sums and write in the missing signs. (<, > or =)

a)   38 litres + 47 litres = [ ][ ] litres [ ] 100 litres

b)   48 litres + 52 litres = [   ] [ ] 100 litres

c)   78 litres – 25 litres = [ ][ ] litres [ ] 50 litres

d)   96 litres – 45 litres = [ ][ ] litres [ ] 50 litres

e)   1 litre 78 cl + 23 cl = [   ] [ ] 2 litres

1 The fishermen want to catch only those fish which weigh more than 50 g. Colour these fish red.
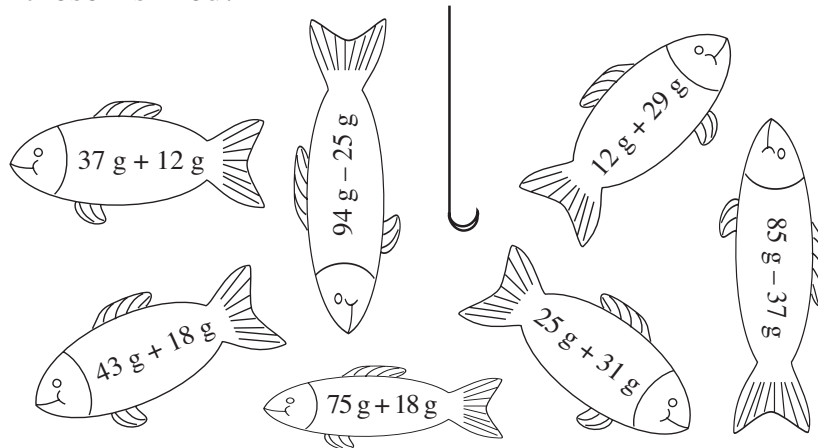
2 This sweet ⬭ weighs 10 g. This sweet ♡ weighs 6 g.

a)   Write in the total weights of:

   i)   4 ⬭ sweets and 1 ♡ sweet: [   ] g

   ii) 3 ⬭ sweets and 3 ♡ sweets: [   ] g

   iii) 2 ⬭ sweets and 5 ♡ sweets: [   ] g

b)   What is the **largest** possible number of ⬭ sweets which in total weigh **not more** than 50g? [   ]

c)   What is the **smallest** possible number of ♡ sweets which in total weigh **not less** than 50g? [   ]

3 Join up the equal quantities.
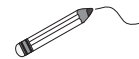
33 kg	69 cl + 31 cl
1 m – 18 cm	1 m
half a metre	40 cm + 42 cm
76 g	100 kg – 67 kg
28 cl + 36 cl	2 times 25 cm
52 cm + 48 cm	98 cl – 34 cl
1 litre	100 g – 24 g

1 Fill in the missing signs and Roman and Arabic numbers.

a) L + X = LX   50 + 10 = 60

b) L − X = XL   50 .... 10 = ...

c) C − L = ...   100 − ..... = ...

d) C − LX = ...

2 In each magic square, the sums of the 3 numbers along each row, column and diagonal are equal. Fill in the missing numbers.

a)
	11	7
9	5	10

b)
10	3	
	5	
6		

c)
14	7	12
10		8

3 Find a rule, then complete the table. Write down the rule in different ways.

a	12	8	23	25				22	37	17	19
b	21	30	7	12	15	8	12			17	19
c	17	12			29		15	14	9		

$a + b + c =$

$a =$

$b =$

$c =$

4 List the quantities which make the inequality true.

87 kg − 23 kg > ⬤ > 25 kg + 24 kg

⬤ : ....
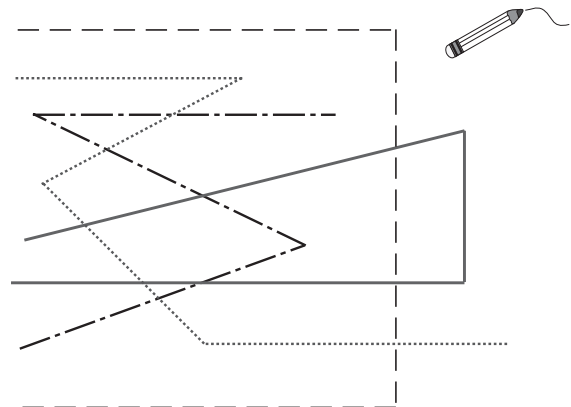
5 Who went which way if they travelled these distances? Join them up.

12 cm

13 cm

14 cm

15 cm

1 Continue the pattern.

$1 \times 2 = 2 \times 1 = 2$ $6 \times 2 = 2 \times 6 =$

$2 \times 2 =$ $7 \times 2 =$

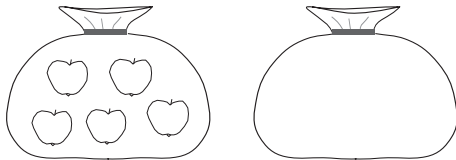$3 \times 2 =$ $8 \times 2 =$

$4 \times 2 =$ $9 \times 2 =$

$5 \times 2 =$ $10 \times 2 =$

2 a) Robert wants to pack 20 apples into bags so that each bag contains 5 apples. How many bags will he need? Continue the drawing.
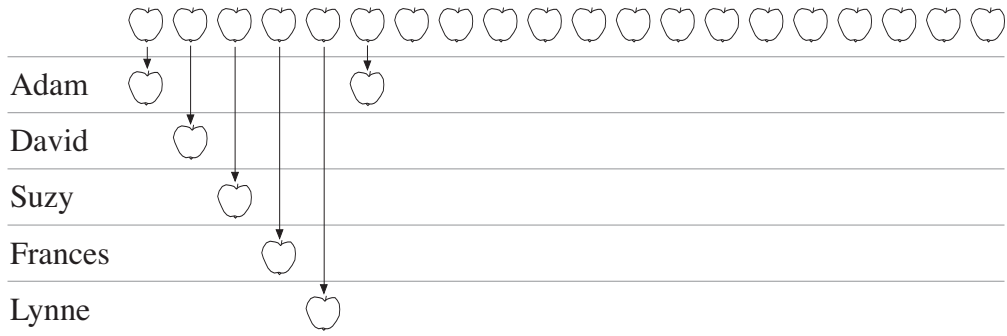

Write an addition, a multiplication and a division about it.

$5 + 5 +$

. . . .

b) Share 20 apples equally among the 5 children. Continue the drawing.

Adam

David

Suzy

Frances

Lynne

How many apples does each child get?

Write an addition, a multiplication and a division about it.

. . . .

3 How much would different bunches of 5 flowers cost? Complete the table.

Cost per flower (p)	2	5		8			9			7	0
Cost per bunch (p)			5		15	50		20	30		
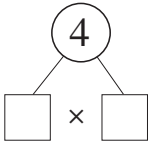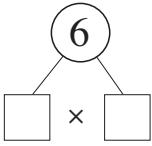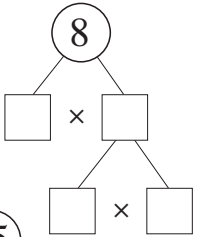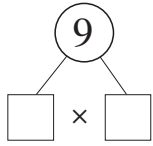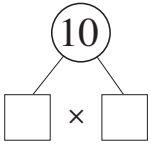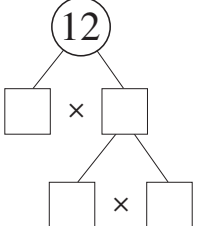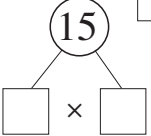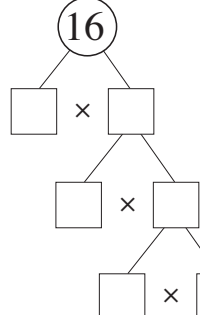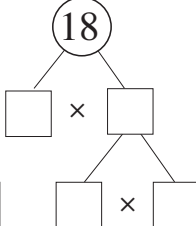
1 Complete the drawings and fill in the missing numbers.

$3 \times \boxed{} = 6$

$6 \div \boxed{} = 2$

$3 \times 3 = \boxed{}$

$\boxed{} \div 3 = \boxed{}$

$3 \times \boxed{} = 12$

$12 \div \boxed{} = 4$

$3 \times 5 = \boxed{}$

$\boxed{} \div 3 = \boxed{}$

$3 \times \boxed{} = 18$

$18 \div \boxed{} = 6$

$3 \times \boxed{} = 21$

$21 \div 3 = \boxed{}$

$3 \times \boxed{} = 24$

$24 \div 3 = \boxed{}$

$3 \times 9 = \boxed{}$

$\boxed{} \div 3 = \boxed{}$

2 Break down the numbers into their factors. Fill in the missing numbers.

4: $\boxed{} \times \boxed{}$

6: $\boxed{} \times \boxed{}$

8: $\boxed{} \times \boxed{}$ → $\boxed{} \times \boxed{}$

9: $\boxed{} \times \boxed{}$

10: $\boxed{} \times \boxed{}$

12: $\boxed{} \times \boxed{}$ → $\boxed{} \times \boxed{}$

14: $\boxed{} \times \boxed{}$

15: $\boxed{} \times \boxed{}$

16: $\boxed{} \times \boxed{}$ → $\boxed{} \times \boxed{}$ → $\boxed{} \times \boxed{}$

18: $\boxed{} \times \boxed{}$ → $\boxed{} \times \boxed{}$

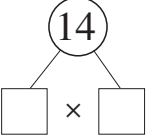**3** Fill in the missing numbers and signs.

a) $3 \xrightarrow{\times 4} \boxed{} \xrightarrow{\div 2} \boxed{}$, $\boxed{}$

b) $3 \xrightarrow{\times 6} \boxed{} \xrightarrow{\div 2} \boxed{}$, $\boxed{}$

c) $\boxed{3} \xrightarrow{\times 3} \boxed{} \xrightarrow{\times 3} 27$, $\boxed{}$

d) $\boxed{} \xrightarrow{\times 2} 6 \xrightarrow{\times 5} \boxed{}$, $\boxed{}$

4 Colour the equal values in the same colour.

$\boxed{2 \times 6}$ $\boxed{3 \times 6}$ $\boxed{3 \times 5}$

$\boxed{4 \times 3}$ $\boxed{5 \times 3}$ $\boxed{9 \times 2}$ $\boxed{6 \times 3}$ $\boxed{3 \times 4}$ $\boxed{2 \times 9}$ $\boxed{6 \times 2}$

1 In each part, the same shape stands for the same digit. Fill in the digits.

a)

$$2 \times \Box\!\mathrel{\mathrm{D}} \times \Box = \triangle\!\mathrel{\mathrm{D}}$$

$$\times \qquad \div \qquad \times \qquad \div$$

$$\bigcirc \times ⭐\!\mathrel{\mathrm{D}} \div \Box = \triangle$$

$$\times \qquad \times \qquad \div \qquad \times$$

$$\Box \times \Box \div \Box = \Box$$

$$= \qquad = \qquad = \qquad =$$

$$\bigcirc\!\mathrel{\mathrm{D}} \div \bigcirc \times \Box = \Box\!\mathrel{\mathrm{D}}$$

b)

$$④ \times ⭐0 \div \Box = \Box0$$

$$\times \qquad \times \qquad \times \qquad \div$$

$$⬠ \times \triangle \div \Box = ⭐0$$

$$\div \qquad \div \qquad \div \qquad \times$$

$$\Box \times ⬠ \times \Box = \Box0$$

$$= \qquad = \qquad = \qquad =$$

$$⭐0 \times \bigcirc \div \Box = \triangle0$$

2 Fill in the missing signs and numbers.

a)

$$5 \times \Box = 5 \times 2 \times 4$$

$$5 \times 4 \times \Box = 5 \times 2 \times 2 \times 2$$

$$3 \times 5 \times \Box = 3 \times 2 \times 5$$

$$5 \ \Box \ 5 \ \Box \ 5 = 5$$

$$5 \ \Box \ 5 \ \Box \ 5 = 6$$

$$5 \ \Box \ 5 \ \Box \ 5 = 20$$

$$5 \ \Box \ 5 \ \Box \ 5 = 30$$

b)

$$2 \times 6 \ \Box \ 2 \times 2 \times 3$$

$$2 \times 7 \ \Box \ 2 \times 8$$

$$2 \times 5 \ \Box \ 2 \times 6 - 2$$

$$6 \times 5 \ \Box \ 5 \times 6$$

$$5 \times 8 \ \Box \ 10 \times 4$$

$$20 \div 10 \ \Box \ 10 \div 5$$

$$30 \div 10 \ \Box \ 25 \div 5$$

3 Do what the arrows tell you. Fill in the missing numbers.

a)

÷ 5 ↗ × 3 ↘ ÷ 2 ↗ ÷ 3 ↘ × 5 ↗ +25 ↘ ÷ 5 ↗ × 10 ↘ − 30 ↗ ÷ 2 ↘

| 2 | 0 |

b)

× 5 ↗ +16 ↘ ÷ 2 ↗ × 3 ↘ − 9 ↗ × 1 ↘ ÷ 5 ↗ × 10 ↘ − 30 ↗ ÷ 10 ↘

| | 0 |

c) Make up your own.
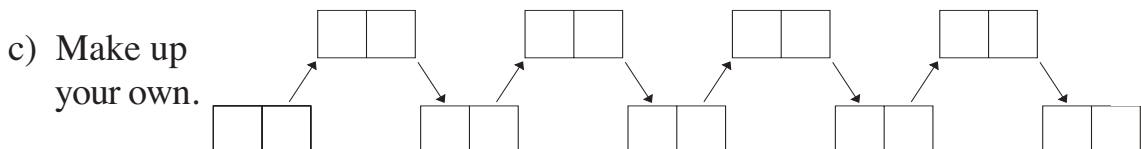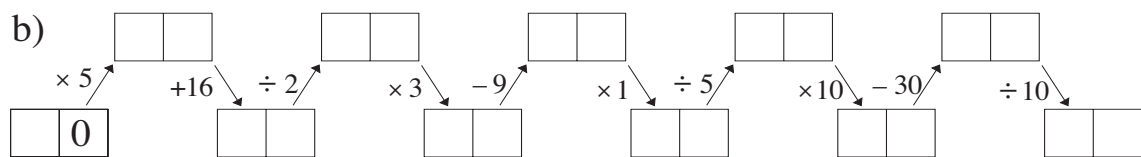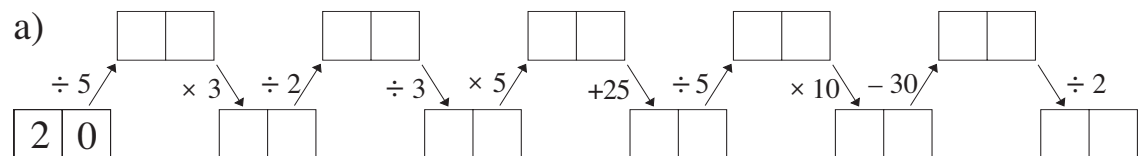
1 Each animal starts at 0 and makes 4 equal jumps.
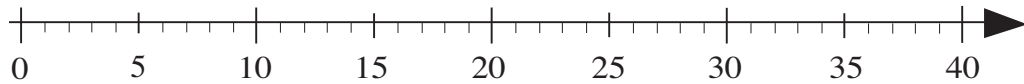
Where do the animals get to? Complete the table.

After 1 jump	0	1		4	5		
After 4 jumps			8			24	32

2 Break down the numbers into their factors. Write each as a multiplication.
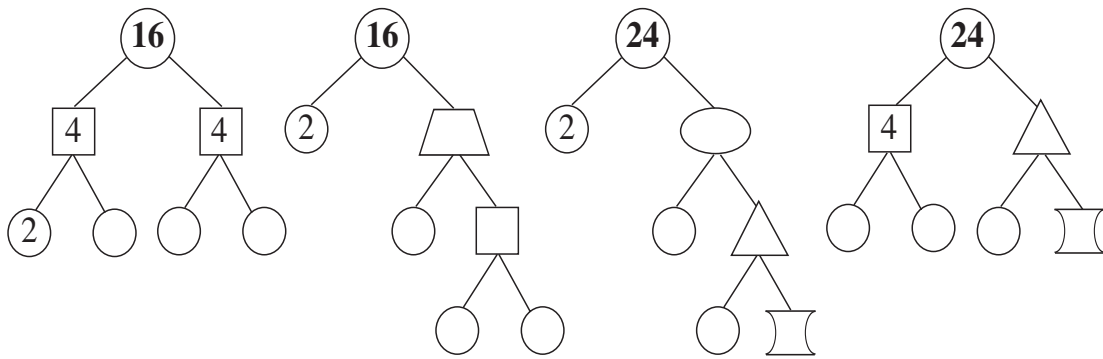
16 = ...   24 = ...

16 = ...   24 = ...

3 Practise multiplication and division.

a) $3 \times 7 =$ ⬚⬚   b) $12 \div 2 =$ ⬚   c) $3 \times$ ⬚ $= 27$

   $5 \times 6 =$ ⬚ $12 \div 4 =$ ⬚ $4 \times$ ⬚ $= 16$

   $9 \times 5 =$ ⬚ $50 \div 10 =$ ⬚   ⬚ $\times 5 = 35$

   $4 \times 3 =$ ⬚⬚ $21 \div 3 =$ ⬚ $15 \div$ ⬚ $= 5$

   $10 \times 4 =$ ⬚⬚ $24 \div 4 =$ ⬚   ⬚⬚ $\div 2 = 7$

   $9 \times 3 =$ ⬚⬚ $40 \div 5 =$ ⬚   ⬚⬚ $\div 4 = 9$

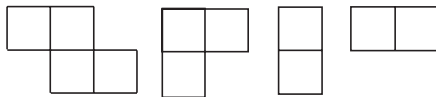**4** Colour the equal values in the same colour.

$16 \div 4$ $10 \div 2$

$14 \div 2$ $20 \div 5$ $18 \div 2$ $15 \div 3$ $21 \div 3$ $45 \div 5$

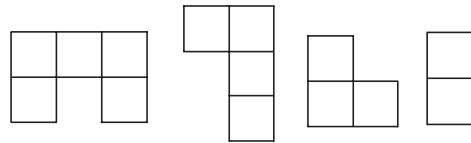**1** Colour the shapes on the grid and fill in the missing numbers if:

a) the **product** of the numbers in each shape is **16**

4	3	2	4	5	2	8	3
4	5	5	3	2	3	4	6
2	7	4	2	4	5	6	7
3	5	2	7	5	2	2	4
6	2	5	4	3	3	2	2

b) the **sum** of the numbers in each shape is **66**.

27	2	18	5	59	25	9	53
6	48	4	53	7	6	37	2
5	35	3	4	26	18	7	2
51	8	25	47	7	37	9	47
6	14	4	3	54	5	51	8

2 Complete the table.

The rule is:

$a + 3 = b \times 3 = c - 3$

a	0	15									
b	1										
c	6										

3 List the numbers which make the inequalities true.

a) $4 \times 8 < \boxed{} < 5 \times 7$

$\boxed{}$: . . . .

b) $36 \div 4 > \bigcirc > 50 \div 10$

$\bigcirc$: . . . .

c) $3 \times 7 < \blacksquare < 85 - 59$

$\blacksquare$: . . . .

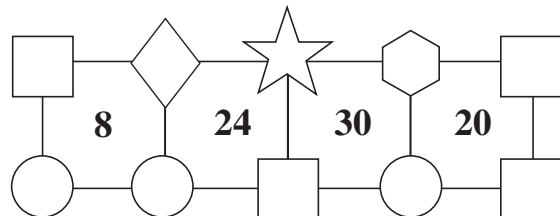d) $18 \div 3 > \bigcirc > 10 \times 0$

$\bigcirc$: . . . .

4 The same shape means the same number. Choose from 1, 2, 3, 4 or 5.

The middle number is the **product** of the 4 numbers around it.

Fill in the missing numbers.

8   **24**   **30**   **20**

5 Fill in the missing numbers and signs.

$8 \xrightarrow{\times 2} \boxed{} \xrightarrow{\div 4} \boxed{} \xrightarrow{\times \boxed{}} 20 \xrightarrow{\div 2} \boxed{} \xrightarrow{\times \boxed{}} 20$
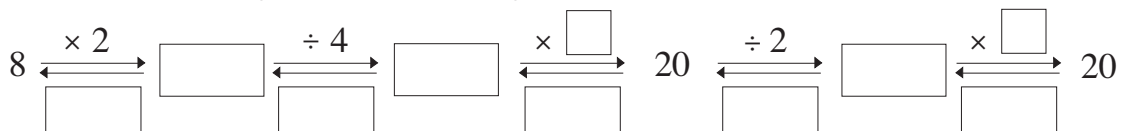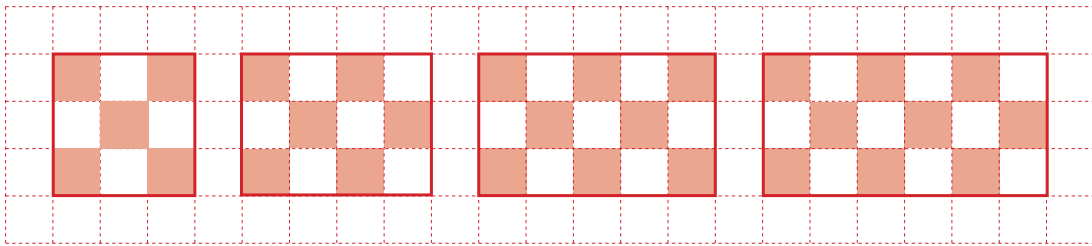
1 Practise calculation.

a) $8 \times 3 = $ ▢▢   b) $24 \div 4 = $ ▢   c) $3 \times $ ▢ $= 12$

$3 \times 3 = $ ▢▢ $30 \div 5 = $ ▢   ▢▢ $\div 5 = 5$

$5 \times 7 = $ ▢▢ $18 \div 3 = $ ▢   ▢▢ $\div 3 = 7$

$10 \times 2 = $ ▢▢ $30 \div 10 = $ ▢   ▢▢ $\div 4 = 8$

$20 + 50 = $ ▢▢ $90 - 60 = $ ▢▢ $35 + $ ▢▢ $= 61$

$26 + 7 = $ ▢▢ $93 - 60 = $ ▢▢   ▢▢ $- 7 = 63$

$6 + 57 = $ ▢▢ $90 - 8 = $ ▢▢   ▢▢ $- 26 = 45$

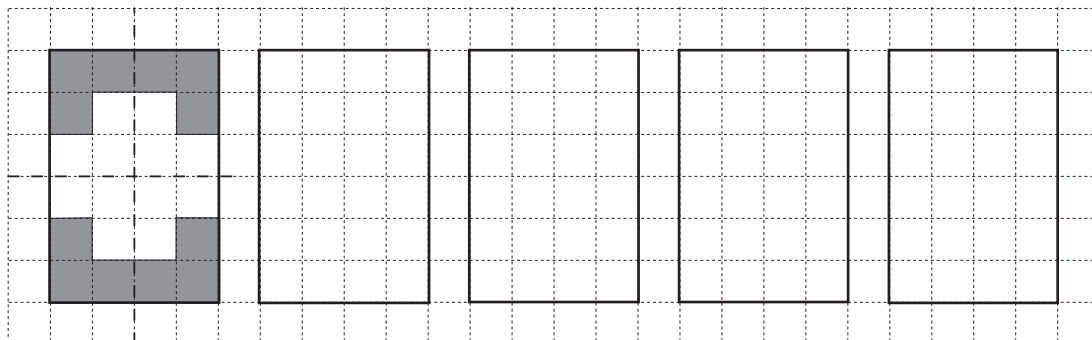$26 + 57 = $ ▢▢ $90 - 68 = $ ▢▢ $100 - $ ▢▢ $= 88$

2 If the shape is **symmetrical**, draw in its **mirror lines**.

3 Colour in 12 grid squares so that the picture is **symmetrical**.

Draw in the **mirror lines**. Try to find different solutions.

4 Write the answers as Roman numerals.

a) $X \times III = $ $V \times IV = $ $III \times VII = $

b) $XII \div III = $ $XXIV \div XII = $ $C \div X = $

1

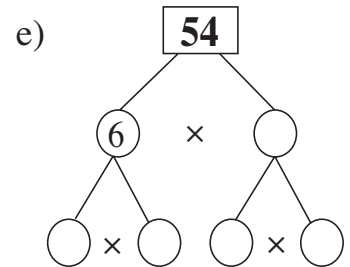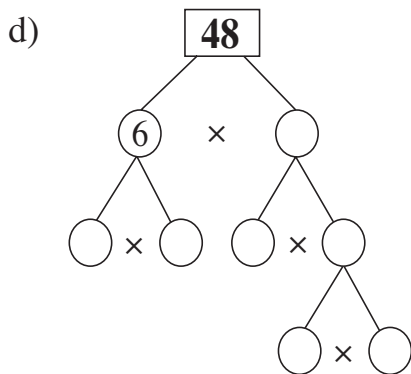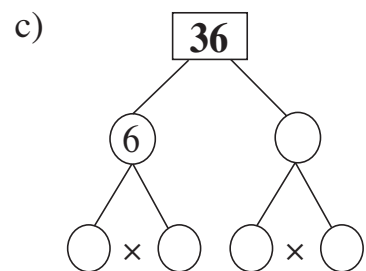a) Six girls have 7 apples each. How many apples do they have altogether?
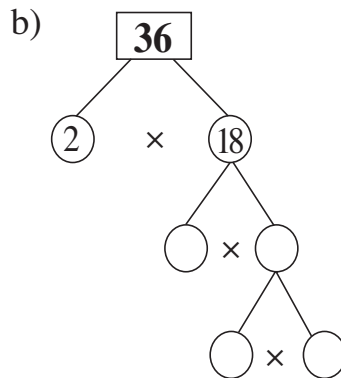
1 girl has ☐ apples.   6 girls have _____ apples.

b) Seven boys have 6 marbles each. How many marbles do they have altogether?

1 boy has ☐ marbles. 7 boys have _____ marbles.

2

Break down the numbers into their factors. Follow the example in a).

a) **30**
5 × 6
2 × 3

b) **36**
2 × 18
○ × ○
○ × ○

c) **36**
6 × ○
○ × ○   ○ × ○

d) **48**
6 × ○
○ × ○   ○ × ○
○ × ○

e) **54**
6 × ○
○ × ○   ○ × ○

3

Fill in the missing numbers and signs.

a) 3 → ×3 → ☐ → ×2 → ☐   ☐

b) 6 → ×2 → ☐ → ×3 → ☐   ☐

c) 48 → ÷2 → ☐ → ÷3 → ☐   ☐

d) 30 → ÷3 → ☐ → ÷2 → ☐   ☐

4
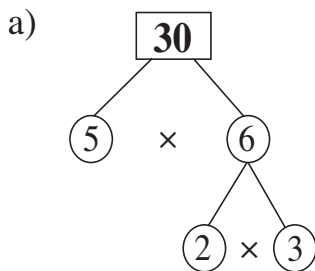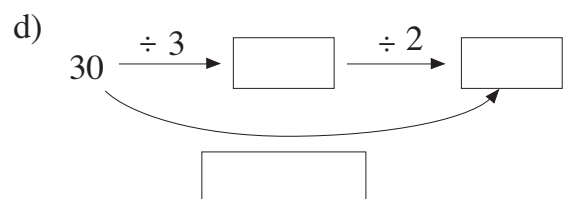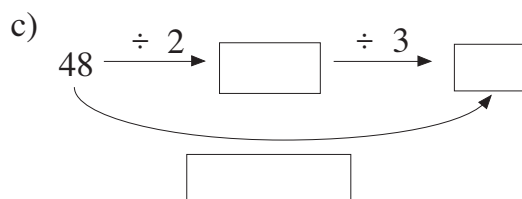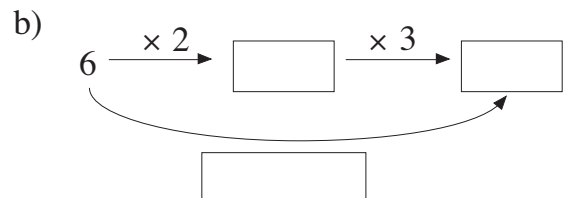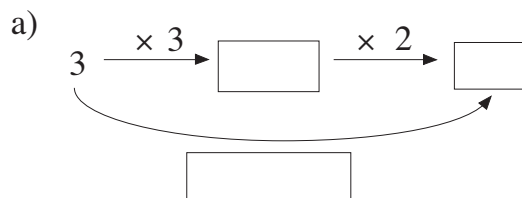
Fill in the missing signs to make the equation true. 7 ☐ 3 ☐ 1 = 20

1 Colour the equal amounts in the same colour.

(28 + 30 + 7 =)   (6 × 2 ÷ 4 =)   (91 – 30 + 7 =)

(91 – 30 + 7 =)   (28 + 7 + 30 =)   (6 ÷ 6 × 7 =)

(6 × 4 ÷ 2 =)   (91 – 7 – 30 =)   (28 + 40 – 3 =)

(6 × 7 ÷ 6 =)   (9 × 3 × 2 =)   (6 ÷ 2 × 4 =)

2 Fill in the missing numbers.

a) **18**   b) **27**   c) **45**   e) **72**

3 Write in the missing numbers and signs.

a)
$2 \xrightarrow{\times 3} \boxed{} \xrightarrow{\times 3} \boxed{}$

$\boxed{}$

b)
$81 \xrightarrow{\div 3} \boxed{} \xrightarrow{\div 3} \boxed{}$

$\boxed{}$

4 Do the calculations in the correct order. Multiply or divide first!

a) $20 + 5 \times 4 \ =$ ☐

$34 - 4 \times 6 \ =$ ☐

$45 - 30 \div 3 =$ ☐

$90 \div 9 + 27 =$ ☐

$73 - 48 \div 6 =$ ☐

$62 - 45 \div 5 =$ ☐

b) $5 \times 8 + 4 \times 7 + 11 \ =$ ☐

$36 \div 4 + 3 \times 5 - 14 =$ ☐

$67 - 3 \times 10 + 6 \times 7 \ =$ ☐

$27 \div 3 + 6 \times 4 - 22 =$ ☐

$80 - 3 \times 10 + 5 \times 7 \ =$ ☐

$100 - 5 \times 10 - 5 \times 0 \ =$ ☐

1

Five girls are going to buy ice-cream. Each of them wants to have a cone with 4 scoops of ice-cream.

There is enough ice-cream left in the tub for 18 scoops.
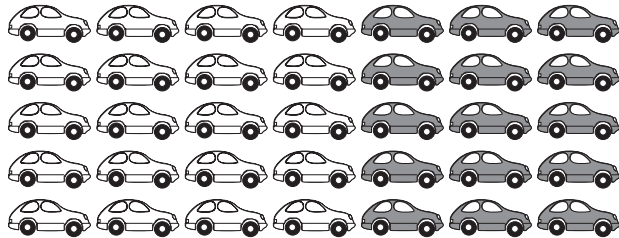Will all the girls be able to buy what they want?
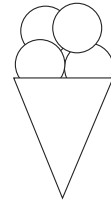
Calculation:

Answer: . . . .

2

There are 5 rows of cars on the garage forecourt.

In each row there are 4 white cars and 3 red cars.

How many cars are there on the garage forecourt altogether?

Do the calculation in 2 different ways.

a)   Number of rows: ☐

Number of cars in each row: (☐ + ☐)

Number of cars in 5 rows: 5 × (☐ + ☐) = 5 × ☐ = ☐☐

b)   Number of white cars: ☐ × ☐   Number of red cars: ☐ × ☐

Number of cars altogether:

☐ × ☐ + ☐ × ☐ = ☐☐ + ☐☐ = ☐☐

Answer: . . . .

3

A **terrarium** is a glass case containing soil and twigs for keeping insects.
Who has more terrariums? Do the calculations. Write in the correct sign.

James has 40 stick insects.
He keeps 8 stick insects
in each terrarium.

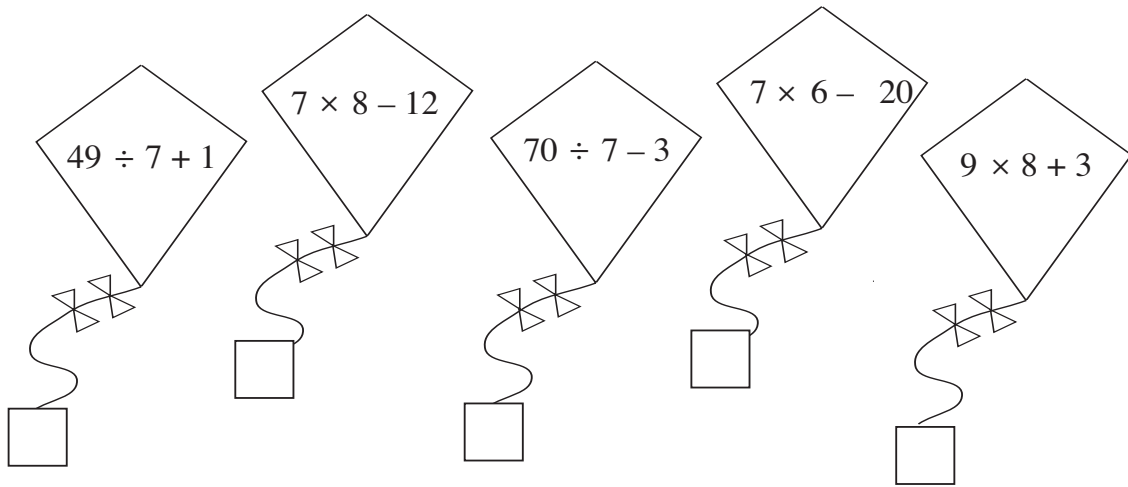Keith has 35 bugs.
He keeps 7 bugs
in each terrarium

. . . .   ☐   . . . .

4

Which has more sides altogether:
Write equations. Fill in the missing sign.

9 pentagons   or   6 octagons?

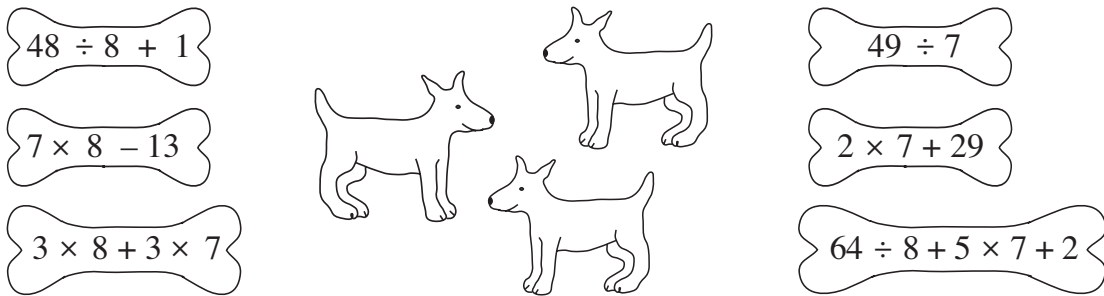. . . . .   ☐   . . . .

1 Put the kites in order of **increasing** value. Write the position number at the end of the string. Colour the kite you think was the easiest to do.

$49 \div 7 + 1$ $7 \times 8 - 12$ $70 \div 7 - 3$ $7 \times 6 - 20$ $9 \times 8 + 3$

2 Which pair of bones belong to which dog? Join up a matching pair of bones to each dog and write the value in the dog.

$48 \div 8 + 1$

$7 \times 8 - 13$

$3 \times 8 + 3 \times 7$

$49 \div 7$

$2 \times 7 + 29$

$64 \div 8 + 5 \times 7 + 2$

3 Do the calculations in the correct order. Fill in the missing numbers.

a) $3 \times 6 + 25 \div 5 = \boxed{}$

   $4 \times 9 + 9 \times 4 = \boxed{}$

   $8 \times (23 - 17) + 22 = \boxed{}$

b) $28 \div 4 - 3 \times 2 = \boxed{}$

   $(72 - 18) \div 9 = \boxed{}$

   $36 \div 6 + 56 \div 8 = \boxed{}$

4 Lisa had £18. She bought 3 books at £4 each and 4 hairslides at £1 each.

How much money (x) does she have left? $x = £ \boxed{}$

Underline the equation which describes the story.

$18 - 3 \times 4 + 4 \times 1 = x$ $(18 - 4) + 3 \times 1 = x$ $18 - 3 \times 4 - 4 \times 1 = x$

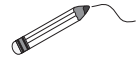**5** Draw a line 12 cm long and divide it into quarters. Each quarter is $\boxed{}$ cm.
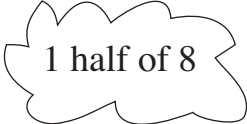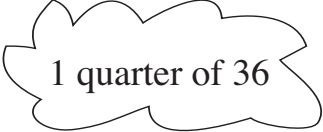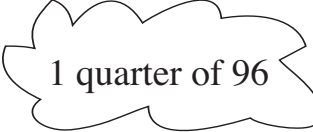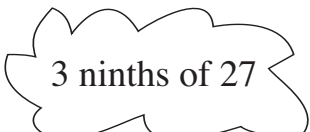
1 Complete the sentences by drawing or writing.

a)   1 half of 🍎🍎🍎🍎🍎🍎 is ⬚ ⬚

b)   1 .... of 𝓸𝓸𝓸𝓸𝓸𝓸𝓸𝓸 is 𝓸𝓸𝓸 3

a)   1 quarter of ⬚ is ??? 3

2 Join up the clouds which show the same numbers.

1 half of 48

1 half of 8

1 quarter of 36

1 quarter of 96

2 eighths of 16

1 third of 18

2 thirds of 9

3 ninths of 27

3 Write the answers as Roman numerals.

a)   1 half of XX =   b)   2 ninths of XVIII =

c)   3 quarters of XL =   d)   3 fifths of XX =

4 Colour:

a)   **1 third** of this grid   b)   **2 fifths** of this grid

c)   **3 quarters** of this grid   d)   **1 third** of this grid

1 There are 24 children in the class. The teacher wants to divide them into equal sized groups. In how many ways can she do it? Complete the table.

Number in each group	2	3	4	5	6	7		
Number of groups	12							
Children left out	0							

2 This is a special **magic square**.

The numbers along each row, column and diagonal add up to 34.

Fill in the missing numbers.

Look for other numbers in the square which add up to 34.

1	14		12
15			6
	5	16	
		2	13

3 Fill in the missing **digits**.

a)   3 ☐ + ☐ 4 = 80

b)   4 × ☐ = ☐ 0

c)   ☐ 7 − 3 ☐ = 22

d)   ☐ 0 ÷ 9 = 1 ☐

4 Use the digits 1, 2, 3 and 4 to make pairs of 2-digit numbers.
Each digit can be used only once in every pair, but can be in any order.

An example of such a pair is: 21 and 34.

a)   Which pairs have the largest **sum**?   ☐☐ + ☐☐ = ☐☐

   and ☐☐ + ☐☐ = ☐☐

b)   Which pairs have the smallest **difference**?   ☐☐ − ☐☐ = ☐☐

   and ☐☐ − ☐☐ = ☐☐

5 A bus is allowed to carry only 16 passengers. There are 9 people waiting at the bus stop. The first bus to stop is half full.

How many people will be left at the bus stop?

÷

☐

1 We are going to throw 2 dice at the same time. How many different **totals** could there be? (*Note*: 1 + 6 = 7 and 6 + 1 = 7 so the totals are the same)

Continue the list.

1	1
1	2

2	

3	

4	

5	

6	

There are ☐ different totals.

---

2 The side of each grid square is a unit. Count the units around the edge of each shape. Write the lengths of the **perimeters** in the boxes below.

A: ☐ units   B: ☐ units   C: ☐ units
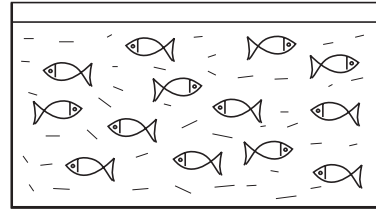
D: ☐ units   E: ☐ units   F: ☐ units

---

3 Practise calculation.

a)   37 + 56 = ☐   25 + 47 = ☐   69 + 18 = ☐

b)   91 − 23 = ☐   87 − 54 = ☐   38 − 19 = ☐

c)   7 × 10 = ☐   3 × 6 = ☐   9 × 8 = ☐

d)   36 ÷ 6 = ☐   25 ÷ 5 = ☐   81 ÷ 9 = ☐

e)   3 × 4 + 20 ÷ 5 = ☐   49 − 42 ÷ 7 + 10 × 0 = ☐

1 There are 13 fish in a tank. Three fish at a time can be lifted out with a small net.

How many times does the net have to be used to lift all the fish out of the tank?

Calculation:

Answer: . . . .

2 Do the calculations in the correct order.

a) $12 - 3 \times 2 + 1$ = ☐   b) $12 + 3 \times 2 - 1$ = ☐

$(12 - 3) \times 2 + 1$ = ☐ $(12 + 3) \times 2 - 1$ = ☐

$12 - 3 \times (2 + 1)$ = ☐ $12 + 3 \times (2 - 1)$ = ☐

$(12 - 3) \times (2 + 1)$ = ☐ $(12 + 3) \times (2 - 1)$ = ☐

$12 - (3 \times 2 + 1)$ = ☐ $12 + (3 \times 2 - 1)$ = ☐

3 Compare the results. Write the corrrect sign between them ($<, >, =$)

a) 13×7 ☐ $10 \times 7 + 3 \times 7$ b) 21×4 ☐ $20 \times 4 + 1$

8×12 ☐ $8 \times 6 + 8 \times 6$ 18×3 ☐ $9 \times 3 + 9 \times 3$

16×5 ☐ $10 \times 5 + 6$ 7×12 ☐ $7 \times 10 + 7 \times 2$

6×13 ☐ $5 \times 13 + 1$ 19×5 ☐ $20 \times 5 - 5$

2×24 ☐ 4×12 27×3 ☐ $30 \times 3 - 3 \times 3$

4 Practise division. Check with multiplication.

a) $25 \div 10 =$ ☐   b) $81 \div 10 =$ ☐   c) $60 \div 10 =$ ☐

remainder ☐   remainder ☐   remainder ☐

Check   *Check*   *Check*

☐   ☐   ☐

1 Write these numbers using digits.

a) Three hundred and fifty ⬚⬚⬚

b) Two hundred ⬚⬚⬚

c) Four hundred and fifty ⬚⬚⬚

d) Six hundred ⬚⬚⬚

e) Eight hundred and fifty ⬚⬚⬚
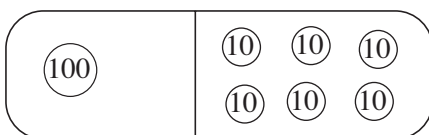
f) Nine hundred and fifty-two ⬚⬚⬚
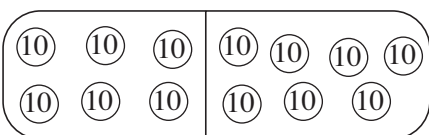
2 Write additions and subtractions about the pictures.

a)
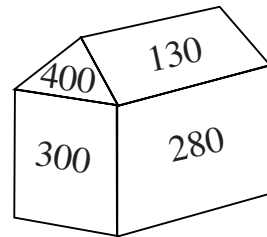(100) | (10) (10) (10) (10) (10) (10)

b)
(10) (10) (10) | (10) (10) (10) (10) (10) (10) (10) (10) (10)

3 Colour the parts of the house as shown.
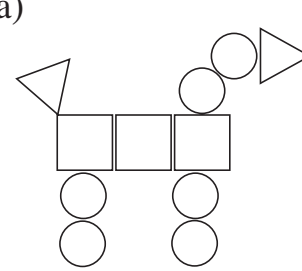
Red: 180 – 50   *Yellow*: 300 + 100

Blue: 210 + 70   *Green*: 500 – 200

400   130

300   280
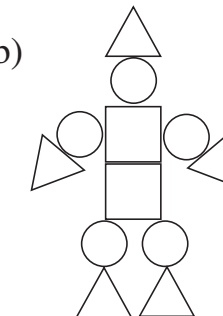
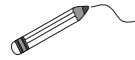**4** Write below each figure its total value if: ◯ = 10, △ = 50, ⬚ = 100

a)

b)

c) Draw a figure of total value 370.

1 Join each cloud to the corresponding point on the number line.

70 + 80   100 + 250   310 + 120

100   200   300   400   500   600   700   800
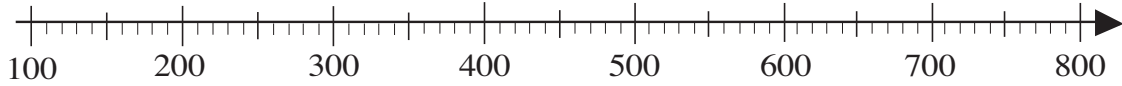
680 – 40   750 – 50   320 – 120

2 Fill in the missing numbers.

a) 4 m 26 cm = ☐☐☐ cm   b) ☐ m ☐☐ cm = 317 cm

£ 1 40 p = ☐☐☐ p   £ ☐ ☐☐ p = 145 p

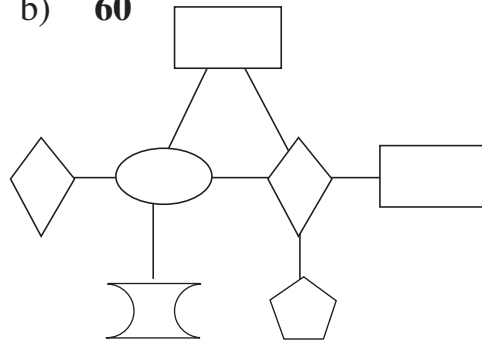2 litres 81 cl = ☐☐☐ cl   ☐ litre ☐☐ cl = 450 cl

3 The same shape stands for the same 1-digit number greater than 1.

Fill in the numbers if the **product** of the numbers along each line equals:

a) **64**
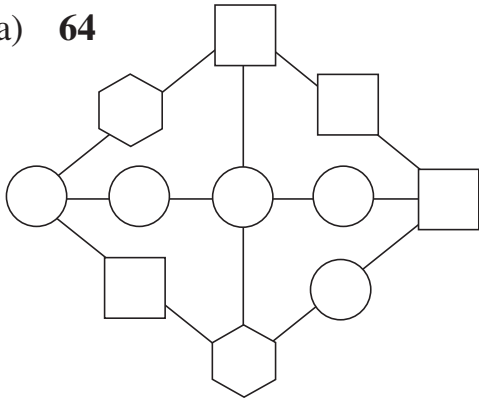
b) **60**

4 Use this **code** to write secret messages.

Secret code

a	b	e	h	i	m	n	o	s	t
↓	↓	↓	↓	↓	↓	↓	↓	↓	↓
0	1	2	3	4	5	6	7	8	9

a) **Code** this secret message.

m e e t   m e   a t   t e n

☐☐☐☐ ☐☐ ☐☐ ☐☐☐

b) **Decode** this secret message.

☐☐☐ ☐☐ ☐☐☐☐ ☐☐☐☐
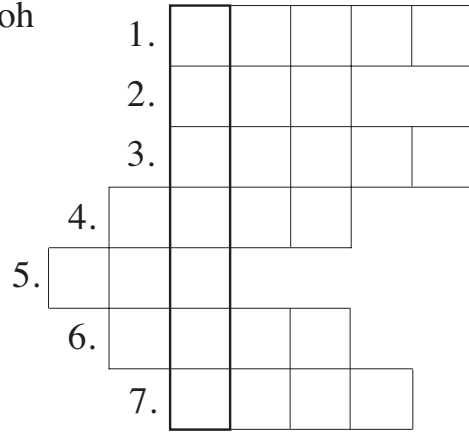1 2 6   4 8   6 7 9   3 7 5 2

c) **Code** your own secret message for a friend to **decode**.

1

Fill in the grid using the clues given. Write the answers in words.

1. The favourite food of Winnie the Pooh

2. Half of two

3. A yellow, sour fruit

4. The number of fingers on one hand

5. 2 . . . . . . 3 = 5

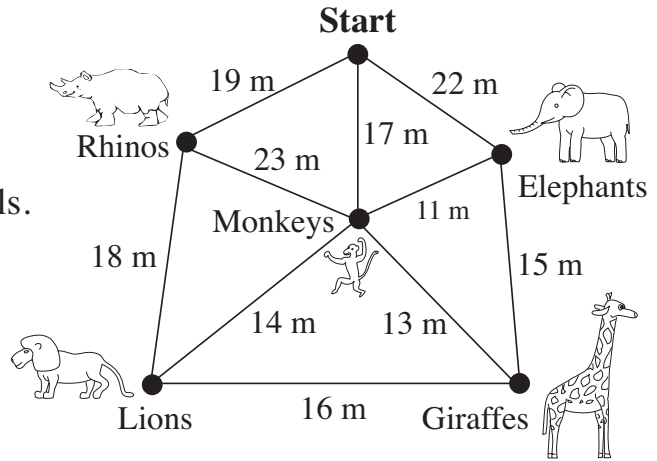6. The subject this lesson is about

7. 12 months

2

You are visiting a zoo and you want to see **all** the animals.

The map shows the paths and the distances between the animals.

Begin and end at **Start**.

a) Find a route.
List all the animals in the order you visit them.

. . . .

The total length of this route is [ ][ ] metres.

b) Try to find a route of length less than 100 metres. The order is

. . . .

The total length of this route is [ ][ ] metres.

Start

19 m   22 m

Rhinos   17 m

23 m   Elephants

Monkeys   11 m

18 m   15 m

14 m   13 m

Lions   16 m   Giraffes

3

This is a **maze**.

Find a route from the entrance to the dot at the centre without crossing over any lines.

Try to find a shorter path.

Entrance