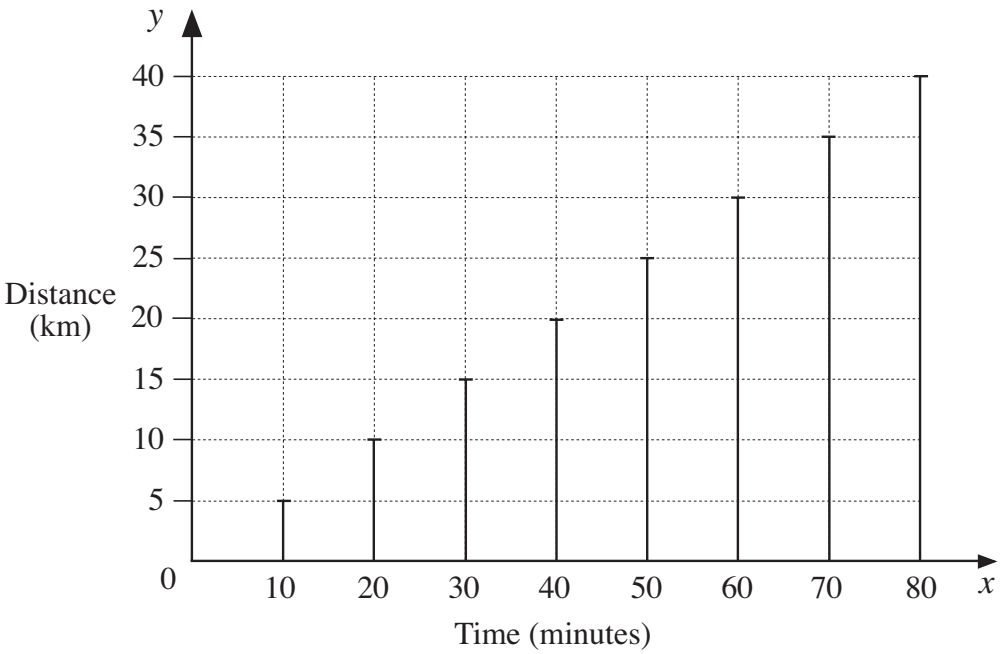
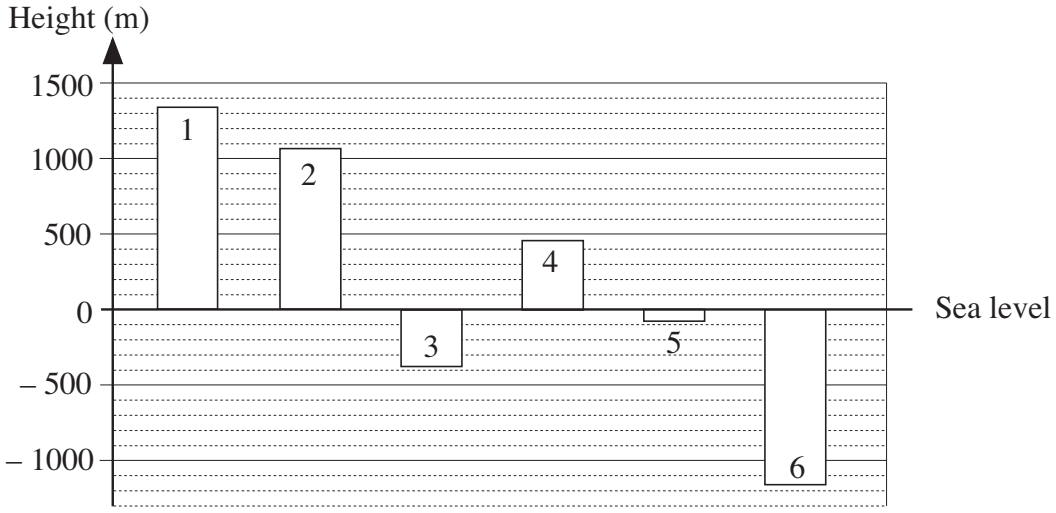
1 Alan went on a cycling tour. He kept a note of how far he had cycled every 10 minutes. He made this graph to show his data.



Use the graph to help you complete the table.

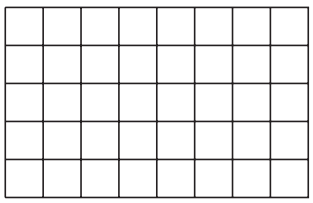
Time (minutes)	0	10	20	30	40	50	60	70	80
Distance (km)	0	5	10	15	20	25	30	35	40

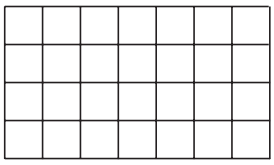
2 This graph shows the approximate height above sea level of famous places. Use the graph to help you fill in the missing numbers.



1. Ben Nevis ≈ 1300 m
2. Mount Snowdon ≈ 1100 m
3. The Dead Sea ≈ −400 m
4. Hay Tor, Dartmoor ≈ 450 m
5. Death Valley, USA ≈ −100 m
6. Straits of Gibraltar ≈ −1200 m

1

a) 

b) 

What are the perimeter and area of each of these diagrams if:

i) the perimeter is measured in ⟷ units and the area in □ units?

a) P = 26 ⟷ units A = 40 □ units

b) P = 22 ⟷ units A = 28 □ units

ii) the perimeter is measured in ⟷ units and the area in ▦ units?

a) P = 13 ⟷ units A = 10 ▦ units

b) P = 11 ⟷ units A = 7 ▦ units

2

Measure the sides of each rectangle in mm and write the lengths beside them.
Calculate the perimeter of each rectangle in mm and write it inside the shape.

a: 72 mm, 24 mm, **P = 192 mm**

b: **P = 64 mm**, 24 mm, 8 mm

c: 36 mm, 36 mm, **P = 144 mm**

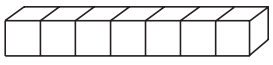
d: **P = 72 mm**, 24 mm, 12 mm

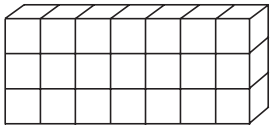
e: **P = 144 mm**, 24 mm, 48 mm

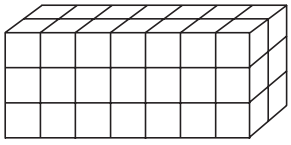
f: **P = 144 mm**, 18 mm, 54 mm

3

How many unit cubes does each of these cuboids contain? This is their **volume**.

a) 
Volume = 7 unit cubes

b) 
Volume = $7 \times 3 = 21$ unit cubes

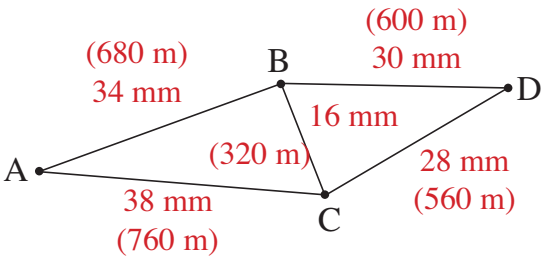
c) 
Volume = $7 \times 3 \times 2 = 42$ unit cubes

1

A, B, C and D are places on a map.

Scale:

1 mm on the map → 20 m in real life.

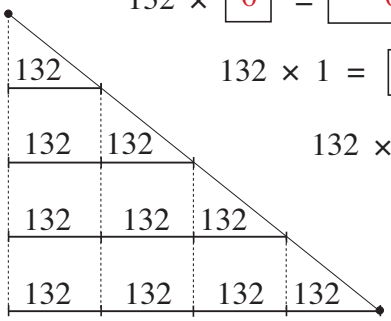


a) Measure each line on the map in mm and write its length beside it.

b) In how many ways can you get from A to D? What distance is each route?

Route	Distance on map	Distance in real life
ABD:	64 mm	1280 m
ABCD:	78 mm	1560 m
ACBD:	84 mm	1680 m
ACD:	66 mm	1320m

2



Study the diagram.
Fill in missing numbers.

132 × 0 = 0

132 × 1 = 132

132 × 2 = 264

132 × 3 = 396

132 × 4 = 528

3

Do the calculations in your exercise books. Fill in the missing numbers.

a) 24 × 70 ml = 1680 ml = 168 cl = 1 ℓ 68 cl

b) 125 × 6 cl = 750 cl = 7 ℓ 50 cl = 7 ℓ 500 ml

c) 174 × 9 cl + 135 × 3 cl = 19 ℓ 71 cl = 19 ℓ 710 ml

4

What is the mass of:

a) 8 tablespoons of flour if 1 tablespoon of flour weighs 15 g? 120 g

b) 7 tablespoons of sugar if 1 tablespoon of sugar weighs 23 g? 161 g

c) 4 tablespoons of salt if 1 tablespoon of salt weighs 28 g? 112 g

d) 2 tablespoons of flour, 3 tablespoons of sugar and 4 tablespoons of salt?

211 g

1 Write each of these times in a different way. Follow the example.

E.g:

a) 13:45 = 1.45 pm

b) 16:30 = 4.30 pm

c) 20:12 = 8.12 pm

d) 22:58 = 10.58 pm

e) 23:04 = 11.04 pm

f) 00:00 = midnight

2 How many hours and minutes have passed from:

a) 08:20 to 10:10

1 h 50 min

b) 07:45 to 09:15

1 h 30 min

c) 10:42 to 14:10

3 h 28 min

d) 18:20 one day to 08:30 the next day?

14 h 10 min

3 Fill in the missing numbers.

a) i) 7 hours = 420 min ii) 15 hours = 900 min

iii) 4 hrs 45 min = 285 min iv) 15 hrs 10 min = 910 min

b) i) 68 min = 1 h 8 min ii) 75 min = 1 h 15 min

iii) 135 min = 2 h 15 min iv) 301 min = 5 h 1 min

c) i) 10 wks 5 days = 75 days ii) 25 wks 3 days = 178 days

iii) 50 wks 2 days = 352 days ii) 52 wks 1 day = 365 days

d) i) 3 min = 180 seconds ii) 8 min = 480 seconds

iii) 5 min 15 sec = 315 sec iv) 20 min 42 sec = 1242 sec

e) i) 121 sec = 2 min 1 sec ii) 250 sec = 4 min 10 sec

iii) 372 sec = 6 min 12 sec iv) 360 sec = 6 min 0 sec

4 a) If the taps are turned on full for 1 minute, 7 litres of water runs into the bath. How much water would have run into the bath after 2 hours?

After 2 hours, 840 litres of water would have run into the bath.
($7 \times 120 = 700 + 140 = 840$ (litres))

b) A car travels 22 m in 1 second. How far has the car gone after 1 minute?

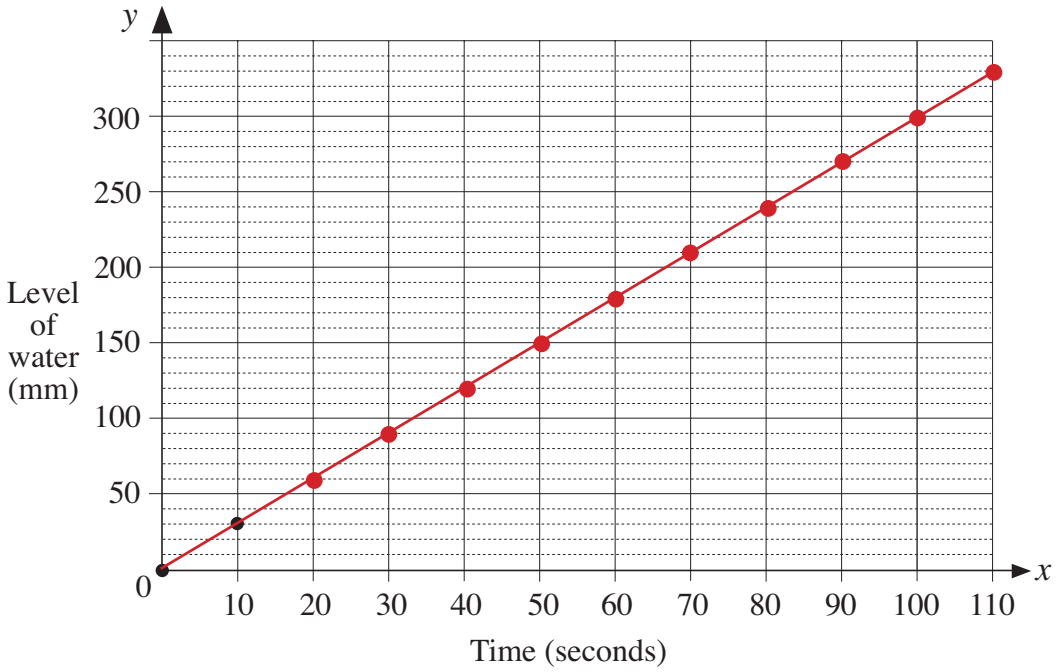
After 1 minute the car has gone 1 km 320 m.
($60 \times 22 = 220 \times 6 = 1320$ (m))

1 We ran water from a tap into a large square-based glass container. We made a note of the water level every 10 seconds.

a) Complete the table.

Time (seconds)	0	10	20	30	40	50	60	70	80	90	100	110
Water level (mm)	0	30	60	90	120	150	180	210	240	270	300	330

b) Draw dots on the graph to show the data in the table. Join up the dots.



c) Write the rule in different ways. L = Level of water, T = Time

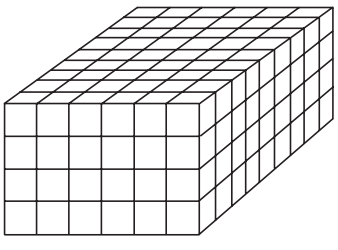
$L = 3 \times T$ $T = L \div 3$ $L \div T = 3$

2 1 kg of tomatoes costs £2.08. Complete the table to show what several kg cost.

Quantity (kg)	1	6	4	9	5	7	1 and a half
Price (pence)	208	1272	832	1872	1040	1456	312

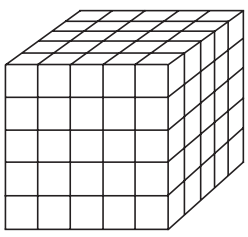
3 What is the volume of each of these cuboids?

a)



$V =$ 216 unit cubes

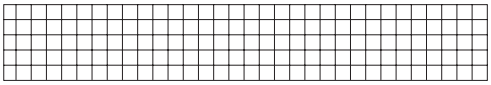
b)



$V =$ 125 unit cubes

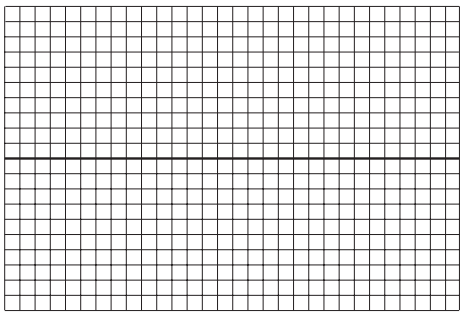
1

Write multiplications and divisions about the diagrams

a) 

E.g: $5 \times 32 = 32 \times 5 = 160$

$160 \div 5 = 32$ $160 \div 32 = 5$

b) 

E.g:

$20 \times 30 = 30 \times 20 = 600$

$600 \div 30 = 20$

$600 \div 20 = 30$

$2 \times 300 = 300 \times 2 = 600$

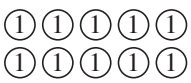
$600 \div 2 = 300$

$600 \div 300 = 2$

2

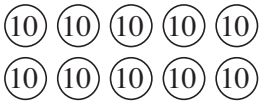
Write two divisions about each diagram.

E.g:

a) i) 

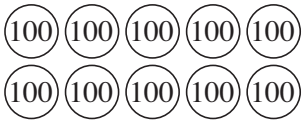
$10 \div 2 = 5$

$10 \div 5 = 2$

ii) 

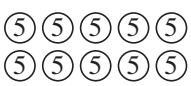
$100 \div 2 = 50$

$100 \div 50 = 2$

iii) 

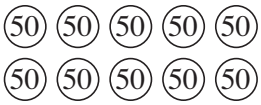
$1000 \div 2 = 500$

$1000 \div 500 = 2$

b) i) 

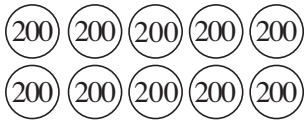
$50 \div 10 = 5$

$50 \div 5 = 10$

ii) 

$500 \div 10 = 50$

$500 \div 50 = 10$

iii) 

$2000 \div 10 = 200$

$2000 \div 200 = 10$

3

Do the divisions. Check them in your head with multiplications.

a) $18 \div 6 = 3$ $180 \div 60 = 3$

$180 \div 6 = 30$ $1800 \div 60 = 30$

$1800 \div 6 = 300$ $1800 \div 600 = 3$

b) $18 \div 9 = 2$ $180 \div 90 = 2$

$180 \div 9 = 20$ $1800 \div 90 = 20$

$1800 \div 9 = 200$ $1800 \div 900 = 2$

c) $54 \div 6 = 9$

$540 \div 6 = 90$

$540 \div 60 = 9$

d) $32 \div 8 = 4$

$320 \div 8 = 40$

$320 \div 80 = 4$

e) $72 \div 9 = 8$

$720 \div 9 = 80$

$720 \div 90 = 8$

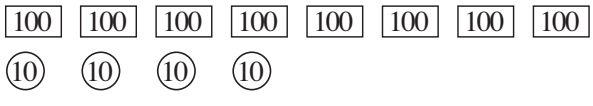
f) $56 \div 7 = 8$

$560 \div 7 = 80$

$560 \div 70 = 8$

4

Divide the amount into 4 equal parts.



1 quarter: 210

1

Write these numbers in the correct number set.

0, 5, 8, 9, 12, 16, 17, 27, 40, 44, 45, 72, 80, 81, 90, 96

a)

Divisible by 8	Not divisible by 8
0 8 16	5 9 12
40 72	17 27 44
80 96	45 81 90

b)

Multiples of 9	Not multiples of 9
0 9 27	5 8 12
45 72	16 17 40
81 90	44 80 96

2

Write these numbers in the correct number set.

3, 9, 8, 1, 36, 12, 4, 6, 18,

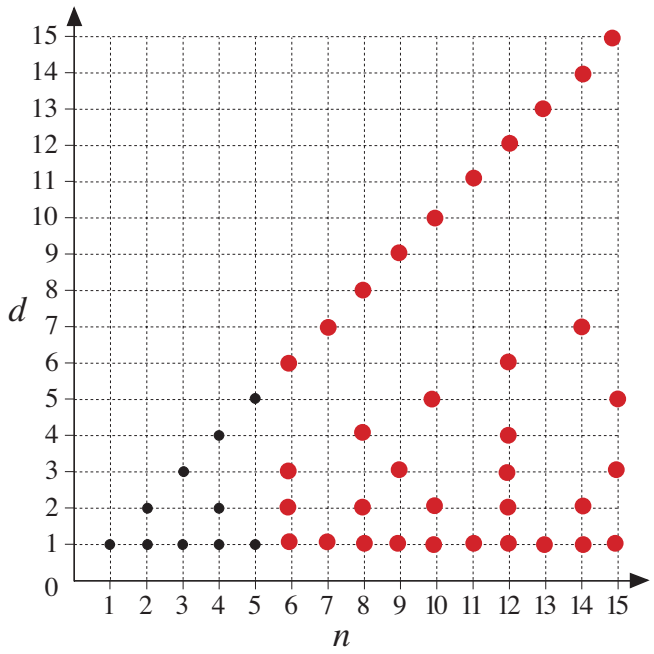
11, 2, 5, 10, 53, 72, 0

Divisor of 36	Not a divisor of 36
3 9 1 36	8 11 5 10
12 4 6 18	53 72 0
2	

3

What is the rule? Complete the table and the graph.

n	d
1	1
2	1, 2
3	1, 3
4	1, 2, 4
5	1, 5
6	1, 2, 3, 6
7	1, 7
8	1, 2, 4, 8
9	1, 3, 9
10	1, 2, 5, 10
11	1, 11
12	1, 2, 3, 4, 6, 12
13	1, 13
14	1, 2, 7, 14
15	1, 3, 5 15



4

Circle the number which you think is the odd one out. Give a reason.

E.g:

a) 60, 90, 180, 30, (50), 300 — 50 is the only number which is not a multiple of 3 (300 is the only whole hundred)

b) 553, 690, 885, 730, (560), 355 — 560 is the only number divisible by 4 (553 is the only number not divisble by 5)

1

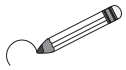
Do the divisions. Check them in your head with multiplications.

a) $189 \div 9 = 21$ b) $126 \div 3 = 42$ c) $168 \div 8 = 21$ d) $155 \div 5 = 31$

$1890 \div 9 = 210$ $1260 \div 3 = 420$ $1680 \div 8 = 210$ $1550 \div 5 = 310$

2

a) Circle the numbers in this list which are divisible by 3.



(0), 7, (9), (60), 67, (69), (1500), 1568, (1569)

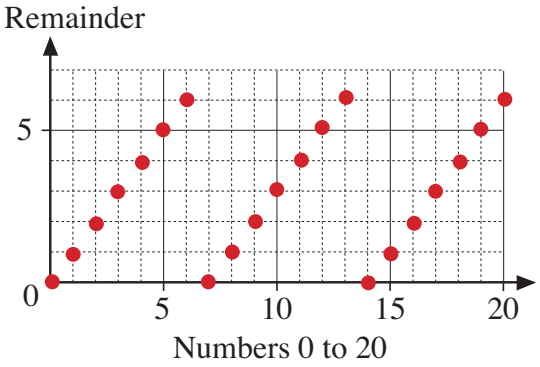
b) Circle the numbers in this list which are multiples of 4.

(0), (4), 6, (80), (84), 86, (1200), (1284), 1286

3

Write the whole numbers from 0 to 20 in the correct column in the table.
Draw dots in the graph to show the remainders.

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



Are these statements true? Write a ✔ if it is true and a ✘ if it is false.

a) If we divide a number by 7, the remainder is less than 7. ✔

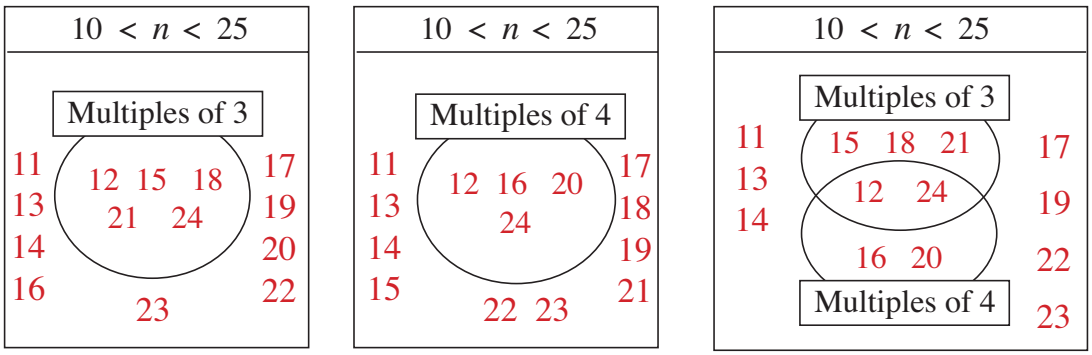
b) If we divide a number by 7, the remainder can be 7. ✘

c) If the remainder is 0 after dividing by 7, the number is a multiple of 7. ✔

d) If we divide a number by 7, then 7 different remainders are possible. ✔

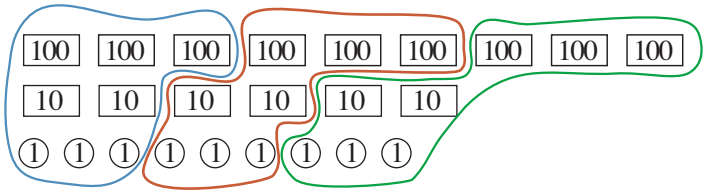
4

Write the whole numbers between 10 and 25 in the correct number sets.



1

Peter, Rob and Sally have the same amount of money in their bank accounts.
Altogether, they have £969. Circle what each of them has.



Complete the calculation.

$969 \div 3 = 900 \div 3 + 60 \div 3 + 9 \div 3 =$ 300 + 20 + 3 = 323

2

Fill in the missing numbers.

a) $840 \div 4 = 800 \div 4 +$ 40 $\div 4 =$ 200 + 10 = 210

$630 \div 3 =$ 600 $\div 3 + 30 \div 3 =$ 200 + 10 = 210

b) $650 \div 5 = 500 \div 5 +$ 150 $\div 5 =$ 100 + 30 = 130

$768 \div 4 = 400 \div 4 +$ 360 $\div 4 + 8 \div 4$

$=$ 100 + 90 + 2 = 192

c) $840 \div 6 = 600 \div 6 +$ 240 $\div 6 =$ 100 + 40 = 140

$459 \div 3 = 300 \div 3 +$ 150 $\div 3 + 9 \div 3$

$=$ 100 + 50 + 3 = 153

d) $910 \div 7=$ 700 $\div 7 + 210 \div 7 =$ 100 + 30 = 130

$960 \div 8 =$ 800 $\div 8 + 160 \div 8 =$ 100 + 20 = 120

3

Fill in the missing numbers.

a) $246 \div 2 =$ 123 $369 \div 3 =$ 123 $484 \div 4 =$ 121

$505 \div 5 =$ 101 $848 \div 4 =$ 212 $848 \div 8 =$ 106

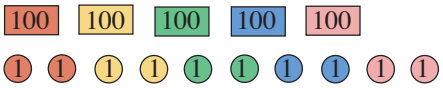
$693 \div$ 3 $= 231$ $864 \div$ 2 $= 432$

b) $824 \div 4 =$ 206 $606 \div 3 =$ 202 $618 \div 6 =$ 103

$906 \div 6 =$ 151 $615 \div 5 =$ 123 520 $\div 5 = 104$

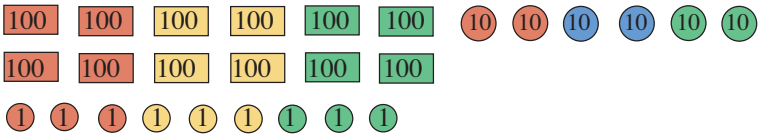
1 Divide the amount into:

a) 5 equal parts



510 ÷ 5 = 500 ÷ 5 + 10 ÷ 5 = 100 + 2 = 102

b) 3 equal parts



1269 ÷ 3 = 1200 ÷ 3 + 60 ÷ 3 + 9 ÷ 3 = 400 + 20 + 3 = 423

2 a) Write the whole numbers less than 31 in the correct sets.

	Divisible by 5	Not divisible by 5
Divisible by 2	0 10 20 30	2 4 6 8 12 14 16 18 22 24 26 28
Not divisible by 2	5 15 25	1 3 7 9 11 13 17 19 21 23 27 29

b) Write the labels missing from each of the number sets in the diagram.

	Divisible by 3	Not divisible by 3
Divisible by 2	0 6 12 18 24 30	2 4 8 10 14 16 20 22 26 28
Not divisible by 2	3 9 15 21 27	1 5 7 11 13 19 23 25 29 17 - omitted in Practice Book

3 Make a plan. Estimate, calculate and check the result. Write the answer.

a) Alice had £648 in her bank account. She spent 1 eighth of it.
How much did she spend?

Plan: £648 ÷ 8 *Estimate*: £640 ÷ 8 ≈ £80

Calculation: 648 ÷ 8 = 640 ÷ 8 + 8 ÷ 8 = 80 + 1 = 81

Check: 81 × 8 = 648 *Answer*: Alice spent £81.

b) Ben had £648 in his bank account. Frank had 1 quarter of Ben's amount.
How much did Frank have in his account?

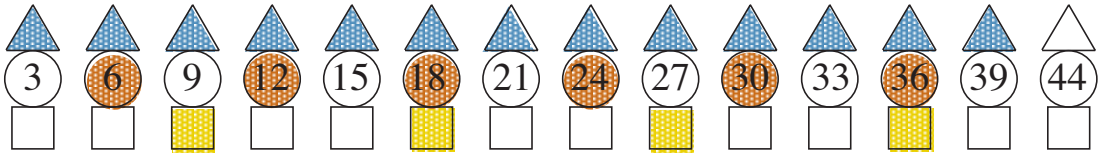
Plan: £648 ÷ 4 *Estimate*: £600 ÷ 4 ≈ £150

Calculation: 648 ÷ 4 = 400 ÷ 4 + 200 ÷ 4 + 48 ÷ 4 = 100 + 50 + 12 = 162

Check: 162 × 4 = 648 *Answer*: Frank had £162.

1

Colour:
- the △ *blue* if the number is divisible by 3.
- the ○ *red* if the number is divisible by 6.
- the □ *yellow* if the number is divisible by 9.



2

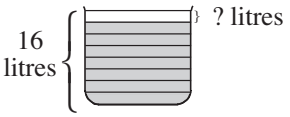
In a flower shop, the roses were tied in bunches of 3. Complete the table.

Number of 	264	81	147	453	360	531	207	162
Number of 	88	27	49	151	120	177	69	54

3

A container was full of water. One eighth of the water was poured out.
How much water was poured out if the full container held:

a) 16 litres

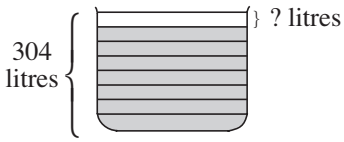


Plan: 16 litres ÷ 8

Calculation: 16 ÷ 8 = 2

Answer: 2 litres of water was poured out.

b) 304 litres

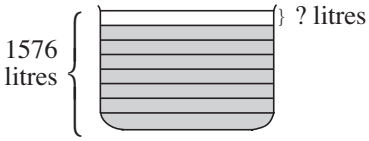


Plan: 304 litres ÷ 8

Calculation: 304 ÷ 8 = 240 ÷ 8 + 64 ÷ 8

Answer: 38 litres of water was poured out.

c) 1576 litres?



Plan: 1576 litres ÷ 8

Calculation: 1576 ÷ 8 = 1600 ÷ 8 − 24 ÷ 8
= 200 − 3 = 197

Answer: 197 litres of water was poured out.

4

Share the amount equally among the groups of people. Complete the table.

Total amount	501	374	895	764	771	995	984	753	Dividend
Number of people	5	3	7	4	6	9	8	2	Divisor
Amount each	100	124	127	191	128	110	123	376	Quotient
Amount remaining	1	2	6	0	3	5	0	1	Remainder

1

a) How much money could Neil have? He has more than £50 but less than £100. He could change his money exactly into £2 coins or £5 notes.

If divisible by 5, numbers must have units digit 5 or 0, but if all divisible by 2, they cannot have units digit 5. Possible amounts: £60, £70, £80, or £90.

b) How many pupils can be in this class? There are less than 30 pupils. The pupils can sit in groups of 2 or 3 or 4 without any pupil being left out.

Number in class must be a multiple of 2, 3 and 4.
Possible numbers: 12 or 24.

2

Is it possible to answer the question with the data given? If it is, solve it.

a) 10 kg of bananas costs £9.40. What is the price of 1 kg of bananas?

£9.40 = 940 p; 940 ÷ 10 = 94 p

b) Steve bought 10 different bars of chocolate and paid £12.00 altogether. What was the price of 1 bar of chocolate?

Cannot be solved. Different bars might have different prices.

c) Karen is 9 years old. She weighs 27 kg. What did she weigh when she was 1 year old?

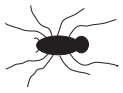
There is no direct proportion between age and mass.

d) 3 men worked steadily and painted a 540 m fence in 9 days. How many days would it have taken 1 man to paint the same fence?

3 men → 9 days, 1 man → 9 days × 3 = 27 days

3

Write the data. Make a plan. Estimate, calculate, check and write the answer.

a)  A spider has 8 legs. How many spiders have 864 legs?

Data: 1 spider: 8 legs, ? spiders: 864 legs

Plan: 864 ÷ 8

Estimate: ≈ 100

Calculation: 864 ÷ 8 = 800 ÷ 8 + 64 ÷ 8 = 100 + 8 = 108

Answer: 108 spiders have 864 legs.

b) A flower has 5 petals. How many flowers have 685 petals in total?

Data: 1 flower: 5 petals, ? flowers: 685 petals

Plan: 685 ÷ 5

Estimate: ≈ 100

Calculation: 685 ÷ 5 = 500 ÷ 5 + 150 ÷ 5 + 35 ÷ 5 = 100 + 30 + 7 = 137

Answer: 137 flowers have 685 petals.

1 I have 3 bags of marbles. Bag A contains 10 marbles, Bag B contains 20 marbles and Bag C contains 30 marbles. One marble in each bag is *red*.

a) Join up each statement to the correct label.

i) If I take out 1 marble from Bag A with my eyes shut, it will be *red*.

ii) If I take out 20 marbles from Bag B with my eyes shut, none will be *red*.

iii) If I take out 2 marbles from each bag with my eyes shut, one will be *blue*.

Certain

Possible but not certain

Impossible

b) Which bag gives me the best chance of picking the *red* marble? Bag A

2 a) Toss a £1coin and a £2 coin at the same time. Do this15 times.

i) Keep a note of how each coin lands in this table. Total each row.

ii) Collect and write the Class data in the right hand column.

		Tosses															Pupil Total	Class Total
		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15		
£1	*Head*																	
	Tail																	
£2	*Head*																	
	Tail																	
	Number of tosses																	

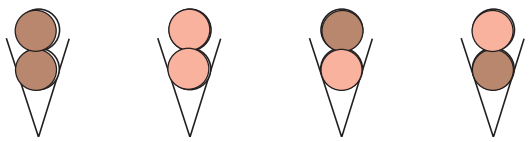
b)

£1		£2	Pupil Total	Class Total
Head	and	Head		
Head	and	Tail		
Tail	and	Head		
Tail	and	Tail		
Number of tosses				

i) Write your own data in this table.

ii) Collect and write the Class data in the right hand column.

3 You asked for a 2-scoop ice-cream, saying, "Chocolate or strawberry please". Colour the ice-creams to show what you could be given.



1

Throw a dice 20 times. Keep a tally in the table. Write the total for each row. Collect the Class data and write them in the right hand column.

	Tally of 20 throws	Pupil Totals	Class Totals
⚀			
⚁			
⚂			
⚃			
⚄			
⚅			

a) How many times would you expect to throw a 4 if you threw a dice

i) 600 times 100 times (as 600 ÷ 6 = 100) ii) 1200 times? 200 times (as 1200 ÷ 6 = 200)

b) What would be the probability of throwing

i) a 6 1 out of 6 times, or 1 sixth ii) at least 5 2 out of 6 times, or 1 third

iii) an even number? 3 out of 6 times, or 3 sixths = 1 half

2

Throw two dice at the same time 36 times. Keep a tally in these tables.

⚀	?	
1	1	
1	2	
1	3	
1	4	
1	5	
1	6	

⚁	?	
2	1	
2	2	
2	3	
2	4	
2	5	
2	6	

⚂	?	
3	1	
3	2	
3	3	
3	4	
3	5	
3	6	

⚃	?	
4	1	
4	2	
4	3	
4	4	
4	5	
4	6	

⚄	?	
5	1	
5	2	
5	3	
5	4	
5	5	
5	6	

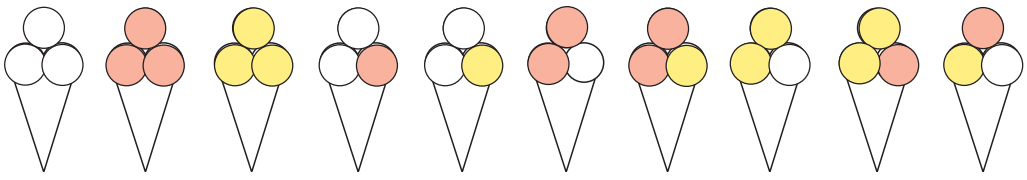
⚅	?	
6	1	
6	2	
6	3	
6	4	
6	5	
6	6	

Collect the Class data. Rub out your tally marks and write the Class data in the tables. Use the Class data to complete this table.

Sum of both dice	1	2	3	4	5	6	7	8	9	10	11	12	13
Number of cases													

3

How could a 3-scoop ice-cream be made from vanilla or strawberry or lemon?



1

Write the data. Make a plan. Estimate, calculate, check and write the answer.

4 tickets cost £5.68. How much would 7 of these tickets cost?

Data: £5.68 = 568 p

Plan: 568 ÷ 4 × 7

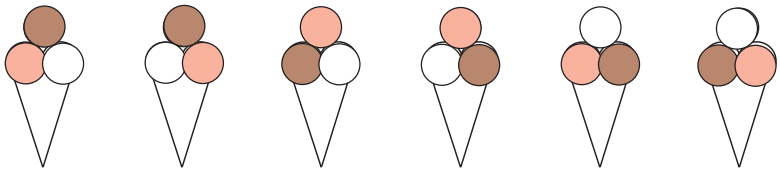
Estimate: 600 ÷ 4 = 150; 150 × 7 = 1050

Calculation: 568 ÷ 4 = 500 ÷ 4 + 60 ÷ 4 + 8 ÷ 4 = 125 + 15 + 2 = 142
7 × 142 = 994

Answer: 7 tickets would cost £9.94.

2

You ask for a 3-scoop ice-cream saying, "Chocolate and strawberry and vanilla please". Colour the ice-creams to show what you could be given.



If position of scoops does not matter, there is only 1 way but if position matters, there are 6 ways.

3

A marble is dropped into this maze. It has an equal chance of falling to the left or to the right.

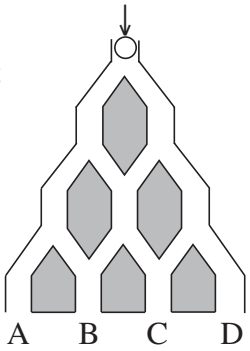
a) In how many ways can the marble come out at:

i) A 1 way

ii) B 3 ways

iii) C 3 ways

iv) D? 1 way



b) Where is it more likely to come out?

B or C as each has a 3 out of 8 chance of happening

c) What is the ratio of the chance of it coming out at A, B, C or D?

A	B	C	D
1	3	3	1

4

Do the operations in the correct order. Do the calculations in your exercise books.

a) 1500 ÷ 5 + 25 × 4 = 400

b) (712 – 268) ÷ 2 + 20 = 242

c) 20 × 90 – 640 ÷ 8 = 1720

d) 735 ÷ 7 × 3 = 315

e) 591 – 9 × 50 + 41 = 182

f) 111 – 68 – 180 ÷ 6 = 13

g) 1827 ÷ 3 – 360 ÷ 40 = 600

h) (823 – 157) ÷ 3 × 2 = 444

5

Colour equal values in the same colour.

160 ÷ 8

1000 ÷ 50

1 tenth of 200

1800 ÷ 90

2 thirds of 300

450 ÷ 5 – 70

1 Write these numbers as Roman numerals. Follow the example.

a) 743 = (500 + 200) + (50 – 10) + 3 = DCC + XL + III = DCCXLIII

b) 287 = 200 + (50 + 30) + (5 + 2) = CC + LXXX + VII = CCLXXXVII

c) 934 = (1000 – 100) + 30 + (5 – 1) = CM + XXX + IV = CMXXXIV

d) 1099 = 1000 + (100 – 10) + (10 – 1) = M + XC + IX = MXCIX

2 a) Change the Roman numerals to Arabic numbers.

DIX = 509 MCMXLV = 1945 CMIV = 904

CDXVI = 416 MCXI = 1111 CMXCIX = 999

b) Write the Arabic numbers in decreasing order.

1945 > 1111 > 999 > 904 > 509 > 416

c) Subtract the 5th number from the 3rd number. Write the difference as Roman numerals.

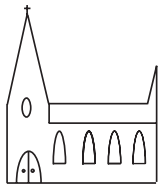
Counting from left to right,
999 – 509 = 490
= CDXC

d) Divide the 2nd number by 11. Write the quotient as Roman numerals.

111 ÷ 11 = 101
= CI

3 Above the entrance to a church, there is a Roman number:

MDCCXCI



a) When do you think the church was built? 1791

b) What Roman number is on the crypt if it was built 153 years before the main church? MDCXXXVIII (1638)

4 a) What rule has been used to make these secret codes?

CILLA	→	201
SHEILA	→	51
EXAMPLE	→	1060
IVANHOE	→	6
MUM	→	2000

Rule: Take each of the Roman numerals in the word and add up their values in Arabic numbers. The order does not matter.

b) Use the rule to find the secret numbers and the missing signs. (<, =, >)

i) ELEPHANT → 50

CROCODILE → 100 + 100 + 500 + 1 + 50 = 751

CADILLAC → 100 + 500 + 1 + 50 + 50 + 100 = 801

ii) 100 BALL (>) BALI 51

100 CAT (=) PACK 100

0 PEN (<) PIN 1

c) Use the rule to write a secret code for 2101. E.g: COME INTO MY HOUSE, MUM CAN SING, etc.

1 Correct the equations.

E.g:

a) VII + V = III

VII – IV = III

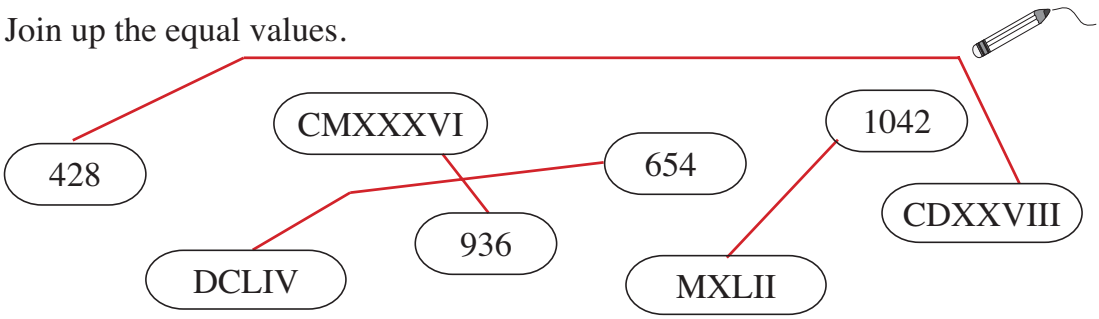
b) XII + III = X

XII – III = IX

c) XI + XXX = X

XL – XXX = X

2 Join up the equal values.



3 Do the calculations. Write the operations using Roman numerals.

a)

	1	2	7
+	3	4	8
	4	7	5

CXXVII + CCCXLVIII = CDLXXV

b)

	6	7	1
–	5	5	8
	1	1	3

DCLXXI – DLVIII = CXIII

c)

	2	3	5
		×	3
	7	0	5

CCXXXV × III = DCCV

d) 847 ÷ 7 =

700 ÷ 7 + 140 ÷ 7 + 7 ÷ 7 = 100 + 20 + 1 = 121

DCCCXLVII ÷ VII = CXXI

4 a) Which Roman numerals could be written instead of the shapes to make the statements true?

i) CDLXXIX (479) < ■ < CDLXXXIII (483)

■ : CDLXXX, CDLXXXI, CDLXXXII (480, 481, 482)

ii) CMXCVIII (998) < ● < MIV (1004)

● : ~~CMXCIX, M, MI, MII, MIII~~ 999, 1000, 1001, 1002, 1003

b) Correct the equations.

E.g:

i) VII – II = II

VII – V = II or VII – II = V

ii) XII + VIII = X

XII + III = XV

iii) V – XV = X + 1

IV = XV – X – I

1 Make a plan. Do the calculation, check it and write the answer in a sentence.

a) Tim has £648, 6 times the amount Laura has. How much does Laura have?

Plan: Laura: £648 ÷ 6 *Calculation*: 648 ÷ 6 = 600 ÷ 6 + 48 ÷ 6
= 100 + 8 = 108

Check: £108 × 6 = £648

Answer: Laura has £108.

b) Gordon has £648. Lenny has twice as much. How much does Lenny have?

Plan: Lenny: 2 × £648 *Calculation*: 648 × 2 = 600 × 2 + 40 × 2 + 8 × 2
= 1200 + 80 + 16 = 1296

Check: £1296 ÷ 2 = £648

Answer: Lenny has £1296.

2 What data are needed? Make a plan. Calculate, check and write the answer.

a) 3 boys and 4 girls were travelling on a 42-seater bus.
Their tickets cost £15.47 altogether. How much was each ticket?

Plan: Ticket: £15.47 ÷ (3 + 4) *Calculation*: 1547 ÷ 7 = 1400 ÷ 7 + 147 ÷ 7
= 1547 p ÷ 7 = 200 + 21 = 221

Check: £2.21 × 7 = £15.47 *Answer*: Each ticket cost £2.21.

b) John had to fill an empty 540 litre container from a 1200 litre container full of water. He used a 4 litre and a 5 litre bucket to transfer the water each time. How many journeys did he make?

Plan: 540 litres ÷ (4 litres + 5 litres) *Calculation*: 540 ÷ 9 = 60
= 540 litres ÷ 9 litres

Check: 60 × 9 = 540

Answer: John made 60 journeys.

3 What was the balance each day? (Do the calculations in your exercise book.)

Monday

Income	Outgoings
£3.56	£2.18

Balance: £1.38

Tuesday

Income	Outgoings
£1.05	£3.46

Balance: − £2.41

Wednesday

Income	Outgoings
£6.56	–

Balance: £6.56

Thursday

Income	Outgoings
£1.43 £5.18	£3.25 £1.89

Balance: £1.47

Friday

Income	Outgoings
£7.25 £9.48	£1.03 £4.28

Balance: £11.42

Saturday

Income	Outgoings
–	£5.23 £2.18

Balance: − £7.41

1 How much money does Alan have? Complete the table.

Had (p)	128	556	436	345	216	434	405
Was given (p)	342	223	578	329	755	149	347
Now has (p)	470	779	1014	674	971	583	752

$N = H + W$ $H = N - W$ $W = N - H$

2 Susie and Penny have £754 altogether in their bank accounts. How much can they each have? Complete the table.

S (£)	321	212	616	276	187	298	531	639	0	2
P (£)	433	542	138	478	567	456	223	115	754	752

$754 = S + P$ $S = 754 - P$ $P = 754 - S$

3 a) Kim has 4 times the amount of money that Leslie has. Leslie has £176. How much do they have altogether? L: £176 K: 4 × £176 (= £704)

L + K = £176 + 4 × £176 = 5 × £176 = £880 or £176 + £704 = £880

Answer: They have £880 altogether.

b) Andrea had £6.42. She bought some flowers for £2.35. The money she has left is 1 third of the money her sister has. How much does her sister have?

A: £6.42 − £2.35 S: A × 3

S: (£6.42 − £2.35) × 3 = £4.07 × 3 = £12.21

Answer: Andrea's sister has £12.21.

c) Eve had £5.64. She bought some sweets with 1 quarter of her money. How much did she have left?

Had: £5.64 Spent: £5.64 ÷ 4

Had left: £5.64 − £5.64 ÷ 4 = £5.64 − £1.41 = £4.23

or £5.64 ÷ 4 × 3 = £1.41 × 3 = £4.23

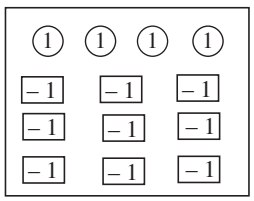
Answer: Eve had £4.23 left.

4 What is the price of 7 tickets if 4 tickets cost £9.24?

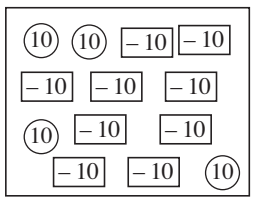
4 tickets cost £9.24 1 ticket costs £9.24 ÷ 4 = £2.31

7 tickets cost £2.31 × 7 = £16.17

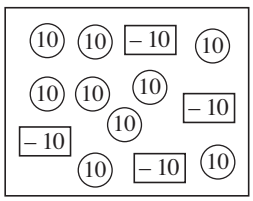
5 Calculate the balance.

a) 

(4 × 1 + 9 × − 1)
(+ 4 and − 9)
Balance = − 5

b) 

(4 × 10 + 9 × − 10)
(+ 40 and − 90)
Balance = − 50

c) 

(9 × 10 + 4 × − 10)
(+ 90 and − 40)
Balance = 50

1 What data are needed? Make a plan. Calculate, check and write the answer.

Twins Peter and John's 2 sisters and 3 cousins clubbed together to buy them books for their birthday. Peter's 5 books cost £8.70 altogether and John's 3 books cost £10.35 altogether.

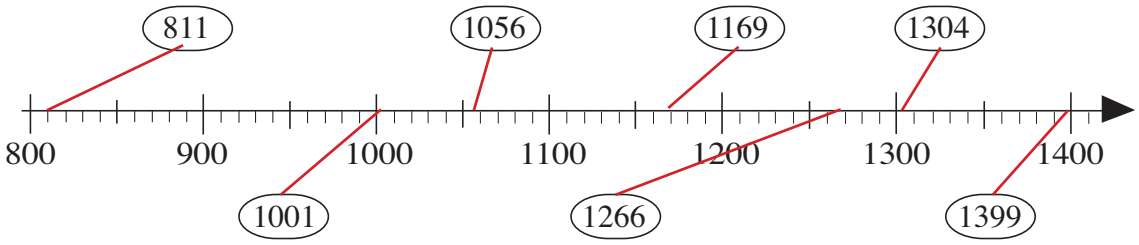
How much did each sister or cousin pay if they shared the total cost?

Plan: (£8.70 + £10.35) ÷ (2 + 3) *Calculation*: = £19.05 ÷ 5 = £3.81

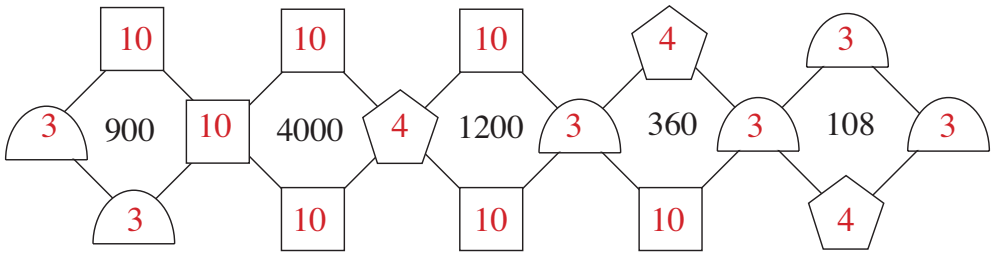
Check: 5 × £3.81 = £19.05

Answer: Each sister or cousin paid £3.81.

2 Join up these numbers to the **approximate** place on the number line.



3 The middle number is the product of the 4 numbers around it. Fill in the missing numbers.



4 Colour the parts stated. Compare the two rectangles. Fill in the missing sign.

E.g:

a)  5 eighths < 7 eighths

b)  7 tenths > 1 half

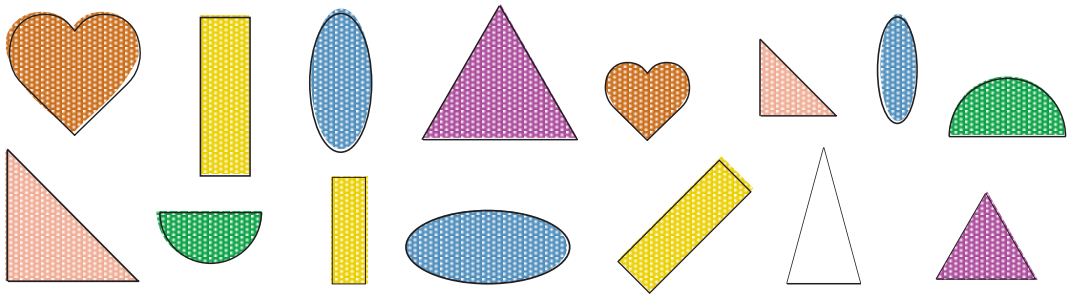
c)  3 quarters > 3 eighths

d)  3 fifths > 1 quarter

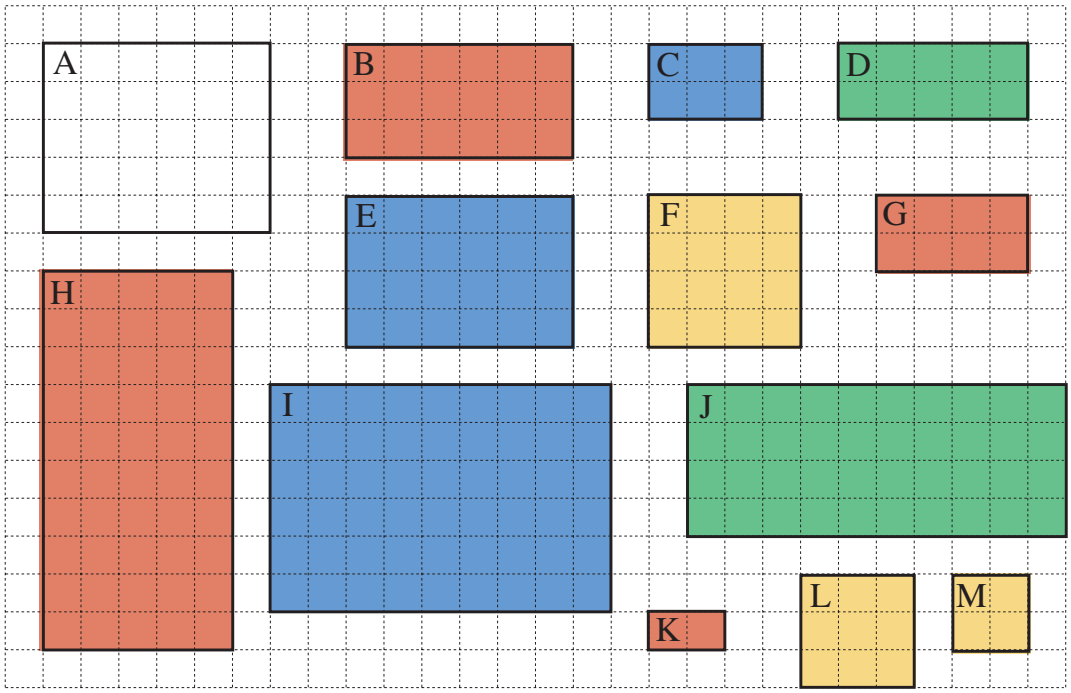
5 Continue the sequence in Roman numerals.

MCL, MC, ML, M, CML, CM, DXXXL, DCCC, ...

1 Colour **similar** shapes in the same colour.

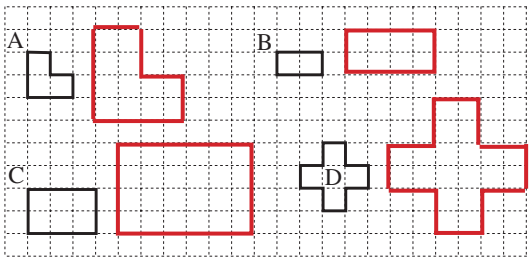


2 Colour **similar** rectangles in the same colour.

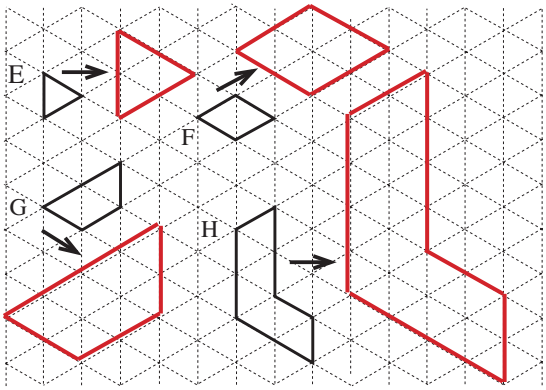


3 Enlarge each shape to twice its size.

a)

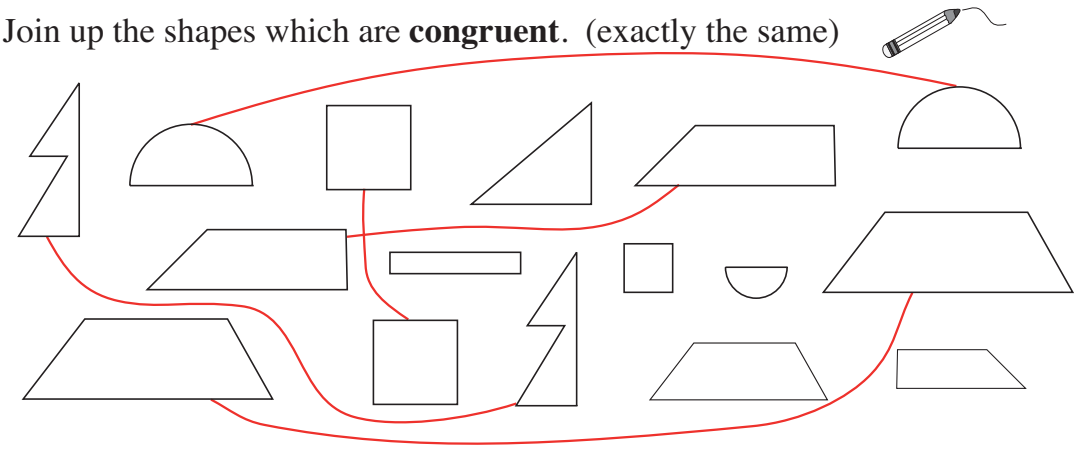


b)

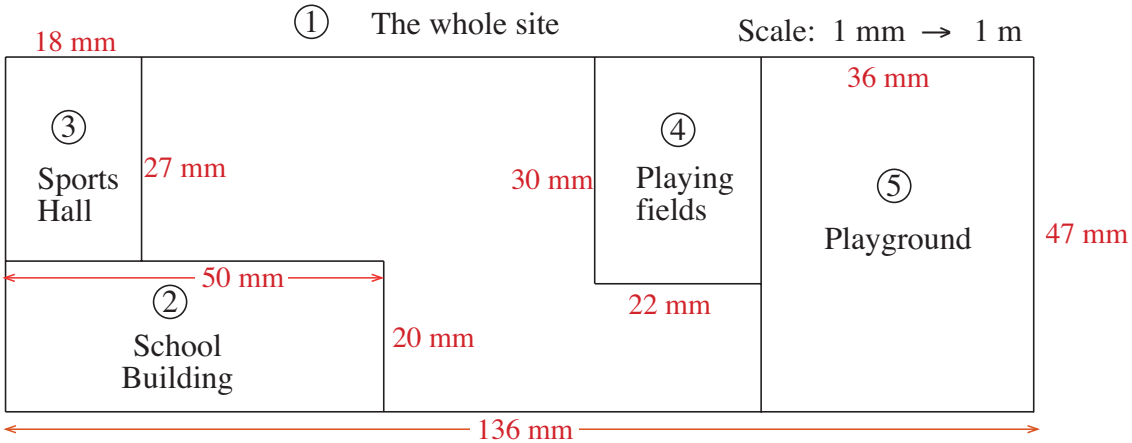


4 Lengthen this line to 3 times its length.

1 Join up the shapes which are **congruent**. (exactly the same)



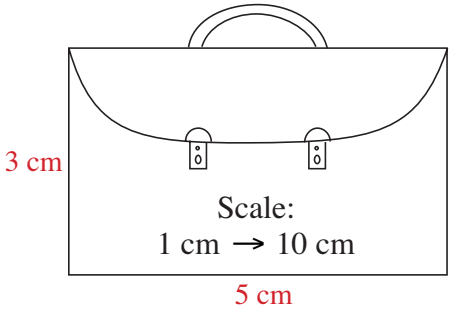
2 This is a plan of a school. Measure each side of the rectangles in the plan.



Calculate the lengths in real life. Write both sets of data in the table.

Rectangle		①	②	③	④	⑤
On plan:	Length (mm)	136	50	27	30	47
	Width (mm)	47	20	18	22	36
In real life:	Length (m)	136	50	27	30	47
	Width (m)	47	20	18	22	36

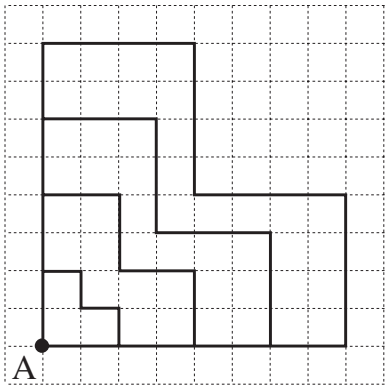
3 This is an enlarged drawing of *Flea*'s briefcase. Measure its sides, then calculate what they would be in real life. Write both sets of data in the table.



On plan:	Length (cm)	5
	Height (cm)	3
In real life:	Length (cm)	50 cm
	Height (cm)	30 cm

1

A is a common **vertex** (corner) of 4 similar shapes.



a) How many times has the smallest shape been enlarged to make the others?

2 times, 3 times, 4 times

b) What are their perimeters in ⟼ units?

P_1 = 8 units P_2 = 16 units

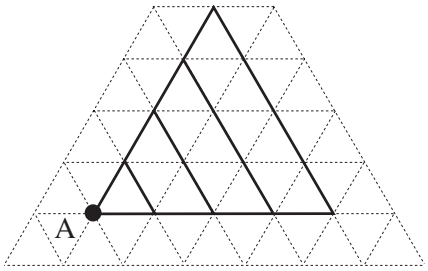
P_3 = 24 units P_4 = 32 units

c) What are their areas in □ units? A_1 = 3 squares,

A_2 = 12 squares, A_3 = 27 squares, A_4 = 48 squares

2

A is a common vertex of 4 similar triangles.



a) How many times has the smallest triangle been enlarged to make the others?

2 times, 3 times, 4 times

b) What are their perimeters in ⟼ units?

P_1 = 3 units P_2 = 6 units

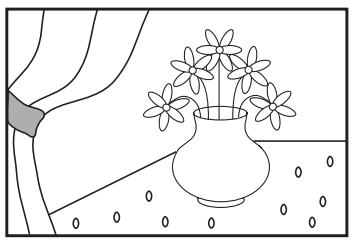
P_3 = 9 units P_4 = 12 units

c) What are their areas in △ units? A_1 = 1 triangle,

A_2 = 4 triangles, A_3 = 9 triangles, A_4 = 16 triangles

3

This is a reduced photocopy of a painting. *Scale*: 10 mm → 20 cm in real life.



a) Measure the sides of the photocopy.

w_1 = 45 mm, h_1 = 30 mm

b) Calculate the sides of the painting.

w_2 = 90 cm, h_2 = 60 cm

c) What length of wood would be needed to make a frame for the painting?

Length: (90 cm + 60 cm) × 2 = 150 cm × 2

= 300 cm (= 3 m)

d) What area of glass would be needed to cover the painting?

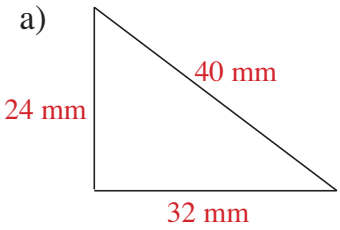
Area: 90 cm × 60 cm = 900 cm × 6 cm

= 5400 cm squares (5400 cm^2)

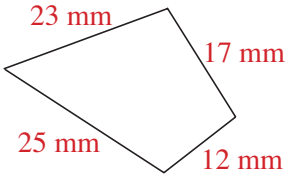
1

Measure the sides of the triangle, quadrilateral and pentagon.
Write the lengths on the diagrams.

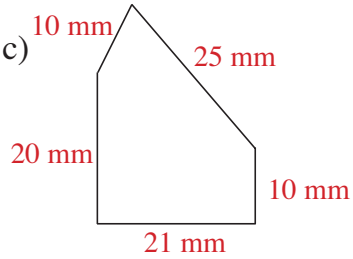
a)



b)



c)



Measure and mark the sides on the horizontal lines.

a)

P = 96 mm = 9 cm 6 mm

b)

P = 77 mm = 7 cm 7 mm

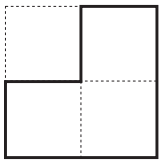
c)

P = 86 mm = 8 cm 6 mm

2

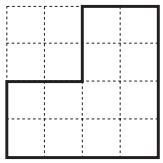
Count how many of the given units are in the perimeter and area of each shape.

a)



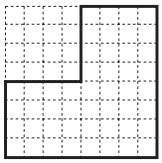
P = 8 ⟝
A = 3 □

b)



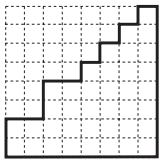
P = 16 ⟝
A = 12 □

c)



P = 32 ⟝
A = 48 □

d)

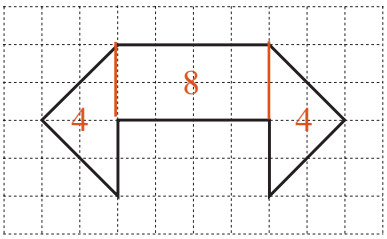


P = 32 ⟝
A = 38 □

3

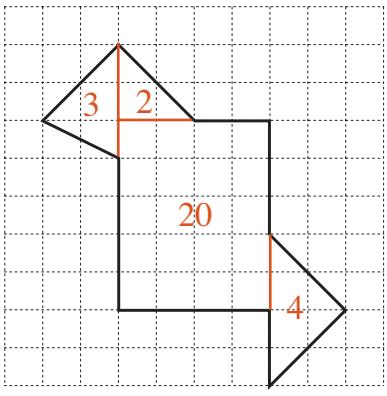
Divide up each shape into rectangles and triangles. Write the area of each smaller shape inside it. Write the total area of each shape in the box.

a)



a) A = 16 unit squares

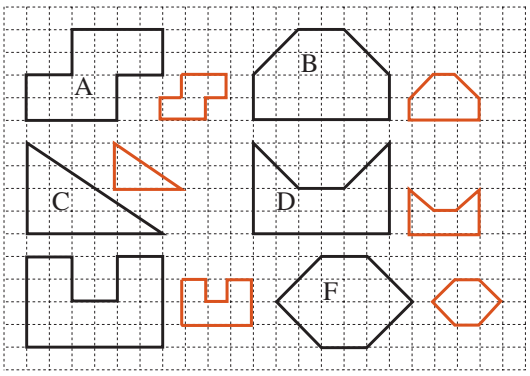
b)



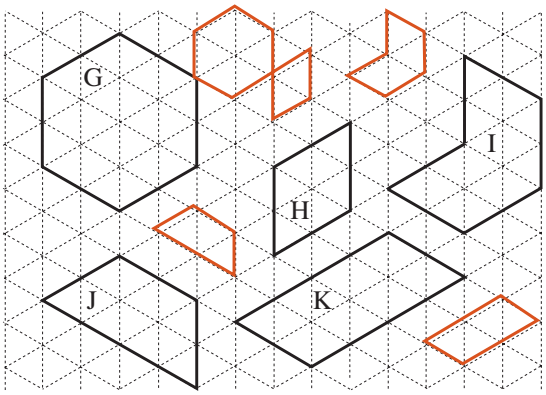
b) A = 29 unit squares

4 Reduce each shape to half its size.

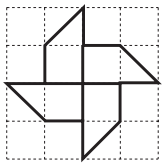
a)



b)

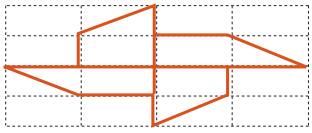


2

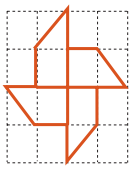


Copy this drawing on the different grids.

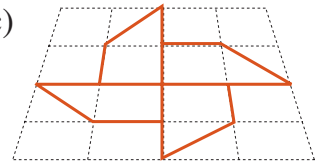
a)



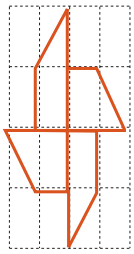
b)



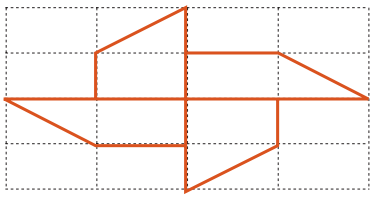
c)



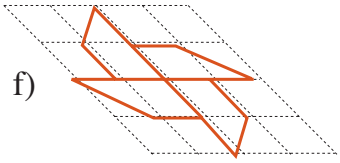
d)



e)

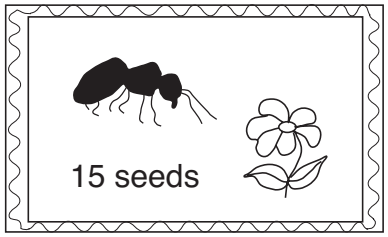


f)



3 This is an enlarged copy of *Ant*'s postage stamp.

Scale: 1 cm on the copy → 1 tenth of a mm on the real stamp



a) Measure the sides of this copy.

w_1 = ..5.. cm, h_1 = ..3.. cm

b) Calculate the sides of the real stamp.

w_2 = ... 5 tenths ..... mm

h_2 = ... 3 tenths ..... mm

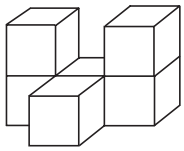
c) What is the perimeter of *Ant*'s stamp? 16 tenths of a mm

d) How many seeds would Ant need to collect to buy 29 of these stamps?

$15 \times 29 = 15 \times 30 - 15 \times 1 = 450 - 15 = 435$

Ant would need 435 seeds to buy 29 stamps.

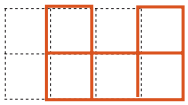
1 This solid has been built from unit cubes. Draw different views of it.



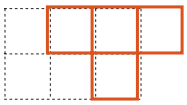
Ground plan

2	1	2
	1	

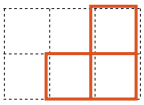
Front view



Top view

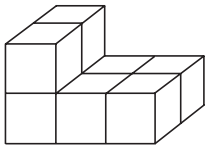


Right side view



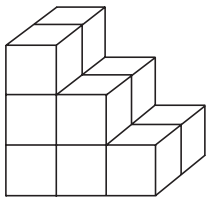
2 Build the solids with unit cubes. Fill in the ground plan for each one.

a)



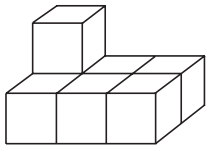
2	1	1
2	1	1

b)



3	2	1
3	2	1

c)

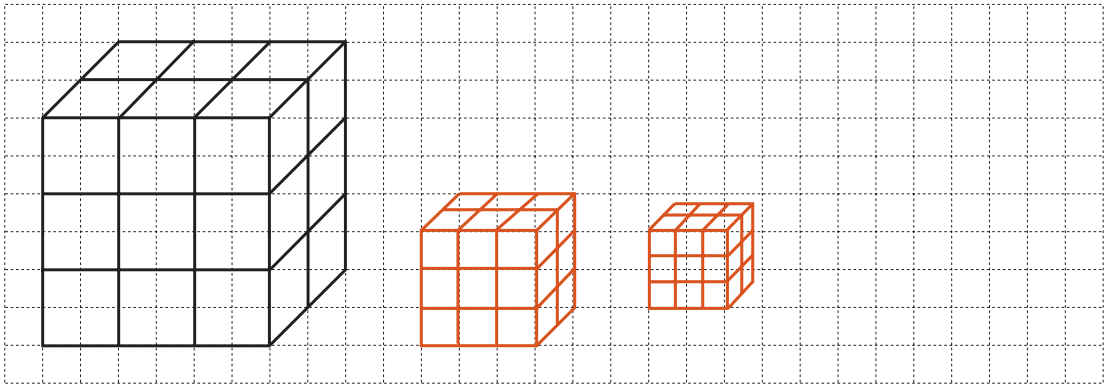


2	1	1
1	1	1

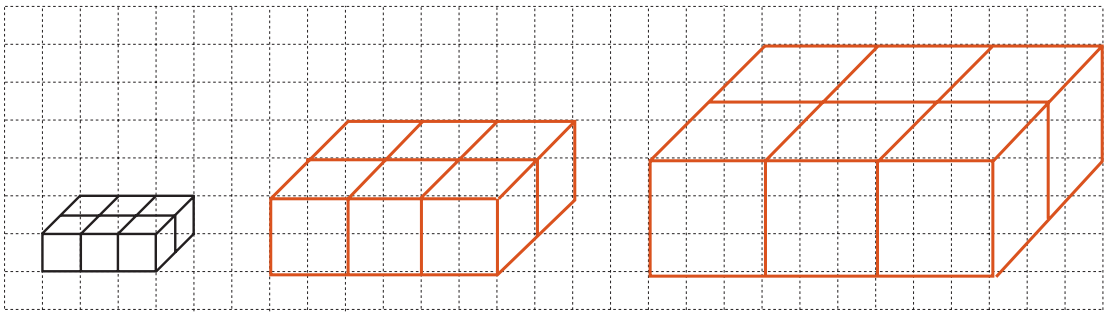
How many unit cubes were needed to build each solid? This is their **volume**.

a) $V = 8$ cubes b) $V = 12$ cubes c) $V = 7$ cubes

3 a) Reduce this cuboid to: i) half its size ii) 1 third of its size.



b) Enlarge this cuboid to: i) twice its size ii) 3 times its size.

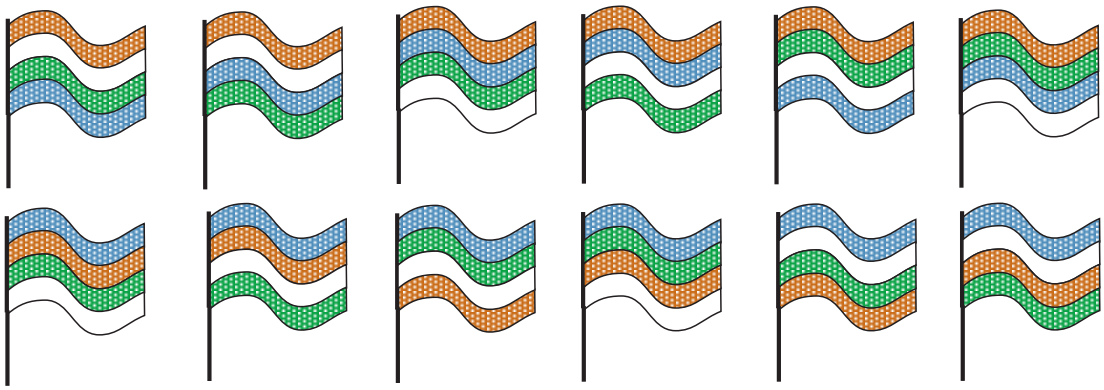


$V = 6$ (unit cubes) $V = 48$ (unit cubes) $V = 162$ (unit cubes)

c) What is the volume of each of the 6 cuboids? Write it beside them.

1

In how many different ways can you colour the flags *red*, *white*, *green* and *blue*? Use every colour only once in each flag.

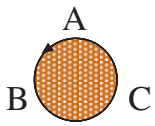


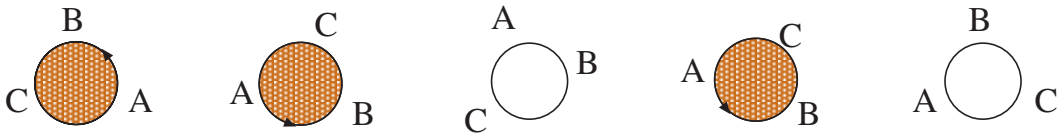
How many different ways are possible? 24 ways (There are 6 with RED at the top, 6 with BLUE, 6 with WHITE and 6 with GREEN, giving a total of 24.)

2

Andrea, Becky and Carol are sitting around a circular table.

Colour the tables where the girls are sitting in the same order.

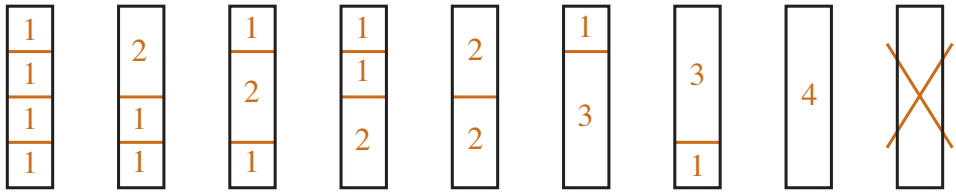




How many different orders are possible? 2 different orders are possible: ABC (anticlockwise) and ACB (anticlockwise).

3

a) In how many different ways can you build a tower 4 units high using 1, 2, 3 or 4 unit rods? Draw the possible ways.

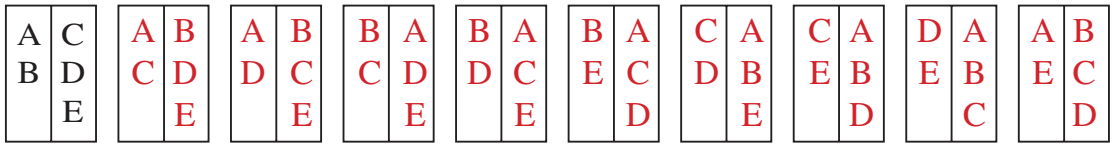


b) If you could use only 1 or 2 unit rods, how many ways are possible? 5

4

Alan, Brian and Charlie go to a summer camp. There are only 2 bedrooms in their hut. One room has 2 beds and the other has 3 beds.

Show on the diagram the different ways they could share rooms.



1

a) Colour the windmills *red*, *white*, *yellow* and *green* so that each one is different from the others.

b) *Mr. Silly* does not know his compass directions. He paints the letters N, E, S and W on the compass at random. What chance does he have of painting the compass correctly?

He has a 1 in 6 (1 sixth) chance.

2

Write the letters E, I, F and L in every possible order. Circle meaningful words.

E I F L	I E F L	F E I L	L E I F
E I L F	I E L F	F E L I	L E F I
E F I L	I F E L	F L E I	L I E F
E F L I	I F L E	F L I E	L I F E
E L F I	I L E F	F I L E	L F E I
E L I F	I L F E	F I E L	L F I E

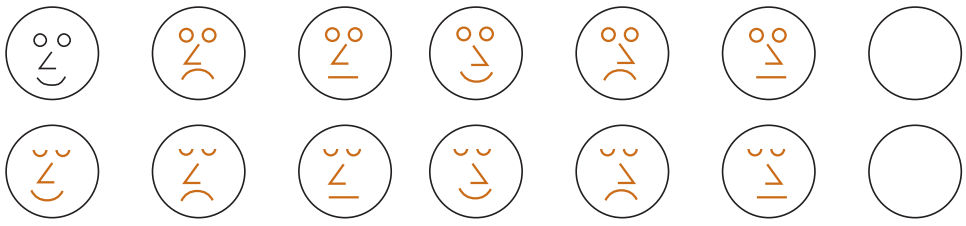
If a computer printed the 4 letters randomly, what chance would there be of it printing a meaningful word?

2 in 2 or 1 in 12

3

How many different faces can you draw if you choose from these features?

Eyes: ○ ○ or ◡ ◡ Nose: ∠ or ∠ Mouth: ◡ or ◠ or —

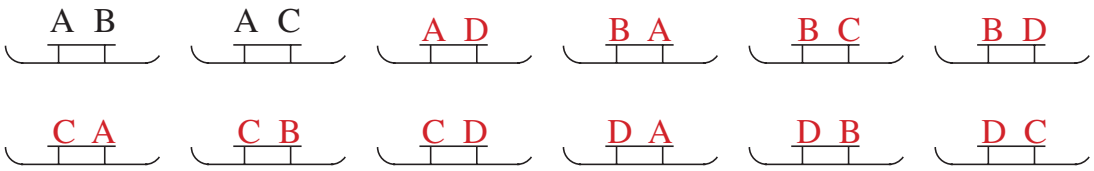


If a machine painted features on 120 faces at random, how many faces would you expect to be smiling?

40 faces

4

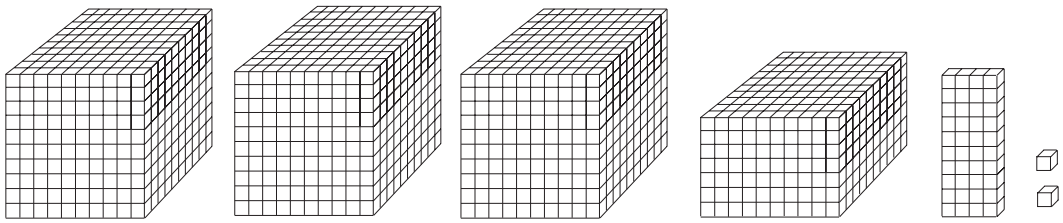
Andrew, Betty, Cliff and Dorothy went sledging with one 2-seater sledge. Show the different ways they can take turns on the sledge.



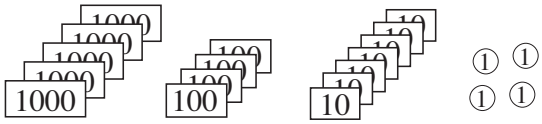
1

Which numbers do the pictures show? Write them in the place-value table.

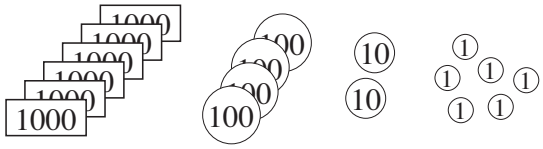
a)



b)



c)



	Th	H	T	U
a)	3	7	4	2
b)	5	4	7	4
c)	6	4	2	6

2

Write the digits in the place-value table, then write the number.

	Th	H	T	U	Number
2 thousands + 6 hundreds + 3 tens + 8 units	2	6	3	8	2638
7 thousands + 3 hundreds + 5 units	7	3	0	5	7305
$6 \times 1000 + 3 \times 100 + 9 \times 10 + 7 \times 1$	6	3	9	7	6397
$4 \times 1000 + 0 \times 100 + 6 \times 10 + 4 \times 1$	4	0	6	4	4064
$8000 + 500 + 40 + 9$	8	5	4	9	8549
$9000 + 50 + 4$	9	0	5	4	9054

3

Practise calculation.

a) $4 + 5 = 9$ $\quad 40 + 50 = 90$ $\quad 400 + 500 = 900$ $\quad 4000 + 5000 = 9000$

$9 - 2 = 7$ $\quad 90 - 20 = 70$ $\quad 900 - 200 = 700$ $\quad 9000 - 2000 = 7000$

b) $3 \times 8 = 24$ $\quad 3 \times 80 = 240$ $\quad 3 \times 800 = 2400$

$6 \times 9 = 54$ $\quad 6 \times 90 = 540$ $\quad 6 \times 900 = 5400$

$7 \times 4 = 28$ $\quad 70 \times 4 = 280$ $\quad 700 \times 4 = 2800$

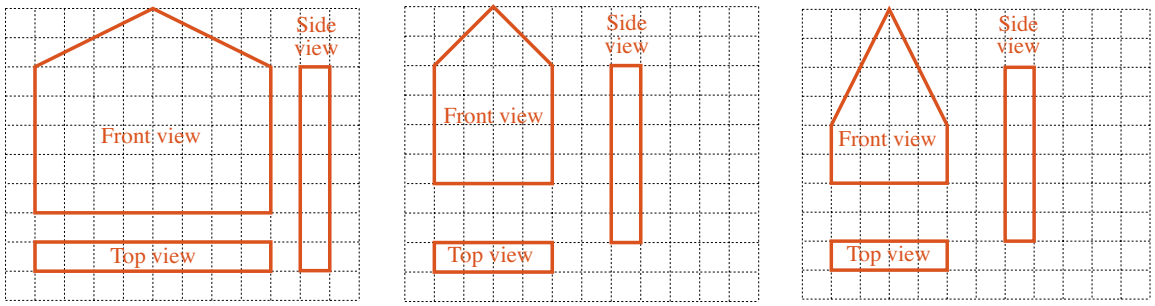
c) $45 \div 5 = 9$ $\quad 450 \div 5 = 90$ $\quad 4500 \div 5 = 900$

$56 \div 7 = 8$ $\quad 560 \div 7 = 80$ $\quad 5600 \div 7 = 800$

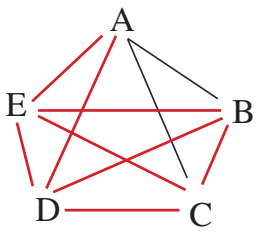
$27 \div 3 = 9$ $\quad 270 \div 3 = 90$ $\quad 2700 \div 3 = 900$

1 These houses were built with wooden blocks.

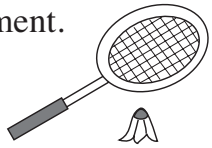
Draw their front, top and side views on a grid sheet or in your exercise books.



2



Five children are in a badminton tournament.
They all have to play one another.



How many matches will be played altogether?

10 matches

3 a) List in increasing order all the 3-digit numbers which have digits 1 or 2.

111 < 112 < 121 < 122 < 211 < 212 < 221 < 222

b) List in decreasing order all the 2-digit numbers which have digits 1, 2 or 3.

33 > 32 > 31 > 23 > 22 > 21 > 13 > 12 > 11

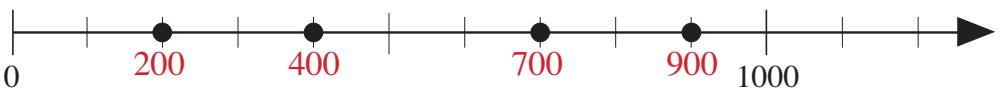
4 Two boys and two girls had enough money for 1 ride in a dodgem car at the fair.
They drew lots to see who would be the passenger and who would steer.

What chance was there of the two girls riding together?

The chance is 1 in 6, or 1 sixth.

5 Write the numbers below the dots.

a)



b)

c)

1

Fill in the missing numbers.

a) i) 1 km = 1000 m ii) 1 km 564 m = 1564 m

iii) 2 km = 2000 m iv) 4 km 105 m = 4105 m

v) 7 km = 7000 m vi) 8 km 16 m = 8016 m

b) i) 1 m = 1000 mm ii) 1 m 45 cm = 145 cm 0 mm

iii) 5 m = 5000 mm iv) 3 m 70 cm 2 mm = 3702 mm

v) 8 m = 8000 mm vi) 5 m 6 cm 3 mm = 5063 mm

2

Change the weights to the given units.

a) 1028 g = 1 kg 28 g b) 1 kg 26 g = 1026 g

2300 g = 2 kg 300 g 3 kg 157 g = 3157 g

3005 g = 3 kg 5 g 8 kg 60 g = 8060 g

416 g = 0 kg 416 g 9 kg 2 g = 9002 g

3

Change the capacities to the given units.

a) 75 cl = 750 ml b) 736 ml = 73 cl 6 ml

138 cl = 1380 ml 502 ml = 50 cl 2 ml

205 cl = 2050 ml 1028 ml = 102 cl 8 ml

3 ℓ 26 cl = 3260 ml 4342 ml = 434 cl 2 ml

4

What is the capacity of the container if we could fill it with:

a) forty 65 cl jugs of water 26 litres (65 cl × 40 = 2600 cl)

b) sixteen 8 litre buckets of water 128 litres (8 litres × 16 = 128 litres)

c) six hundred and forty 5 cl glasses? 32 litres (5 cl × 640 = 3200 cl)

5

Tick the bigger quantity.

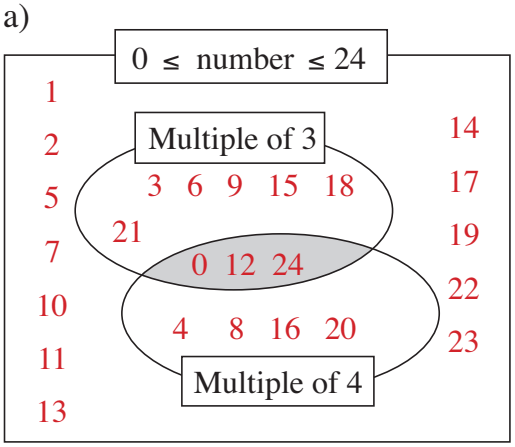
a) 3 quarters of 240 cm or 5 sixths of 240 cm ✓

b) 5 eighths of 1600 g ✓ or 1 half of 1600 g

c) 3 sixths of 3000 ℓ or 3 fifths of 3000 ℓ ✓

1 Write the whole numbers not less than 0 and not greater than 24 in the correct sets.

a)



b)

	Multiple of 3	Not a multiple of 3
Multiple of 4	0 12 24	4 8 16 20
Not a multiple of 4	3 6 9 15 18 21	1 2 5 7 10 11 13 14 17 19 22 23

What can you say about the numbers in the shaded areas?

E.g: They are multiples of 3 and also of 4. They are multiples of 12.
They are divisible by 3 and 4. They are divisible by 12.

2 a) List the numbers which have a hundreds digit greater than 7, a tens digit less than 3, and a units digit which is odd and not greater than 3.

801, 803, 811, 813, 821, 823, 901, 903, 911, 913, 921, 923

b) What is their sum?

E.g:

801	813	901	913	2415
803	821	903	921	2457
+ 811	+ 823	+ 911	+ 923	2715
2415	2457	2715	2757	+ 2757
				10344

c) Which of them are divisible by 3?

801, 813, 903, 921 are divisible by 3.

3 List all the 3-digit numbers in which:

a) the sum of the 3 digits is 5, (15 numbers)
113, 131, 311; 104, 140, 401, 410; 122, 212, 221; 203, 230, 302, 320; 500

b) the product of the 3 digits is 4, (6 numbers)
114, 141, 411, 122, 212, 221

c) the sum of the 3 digits is 4. (10 numbers)
103, 130, 301, 310; 112, 121, 211; 202, 220, 400

4 Make two 3-digit numbers using the numbers 0, 1, 3, 4, 5 and 8 so that:

a) their sum is the least possible, E.g: 108 and 345

b) their sum is the greatest possible, E.g: 841 and 530

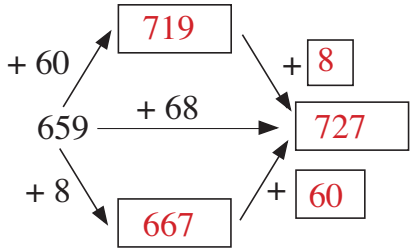
c) their difference is the least possible, 501 and 483

d) their difference is the greatest possible. 854 and 103

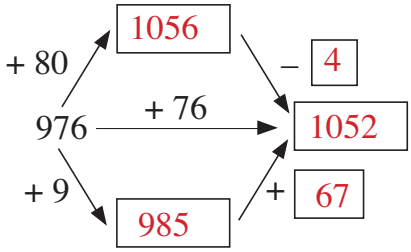
1

Fill in the missing numbers.

a)



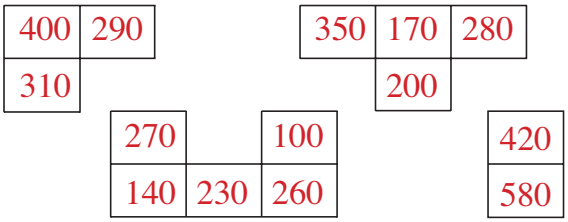
b)



2

Colour the shapes on the grid and fill in the missing numbers if the sum of the numbers in each shape is 1000.

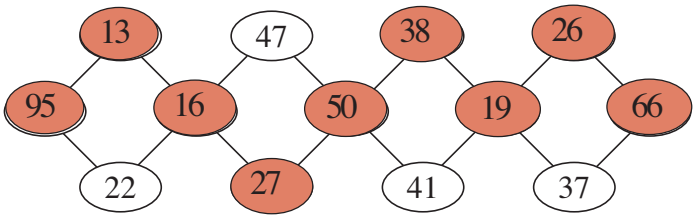
400	290	350	170	280	170
310	260	510	200	430	420
440	270	930	100	120	580
350	140	230	260	280	390



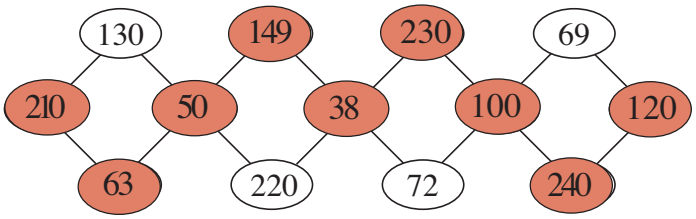
3

Colour a route through the maze so that the sum of the numbers passed is:

a) 350

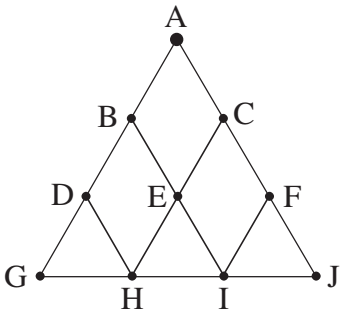


b) 1200



4

How many routes lead from A to G, H, I and J if you can only move down to the left or to the right? Write the letters of each route in order.



A to G 1 route (A B D G)

A to H 3 routes (A B D H, A B E H, A C E H)

A to I 3 routes (A C F I, A C E I, A B E I)

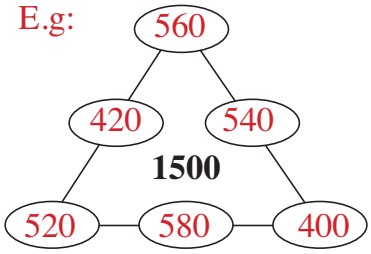
A to J 1 route (A C F J)

1

Write the missing numbers in the puzzles if the sum of the 3 numbers along each side is 1500. Choose from the set of numbers below. Use each number only once.

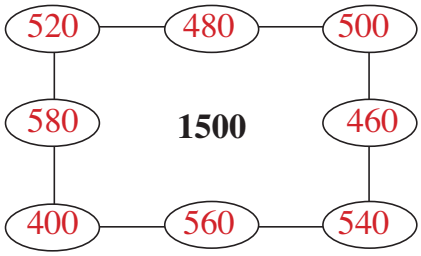
a) 420, 400, 520, 540, 560, 580

E.g:



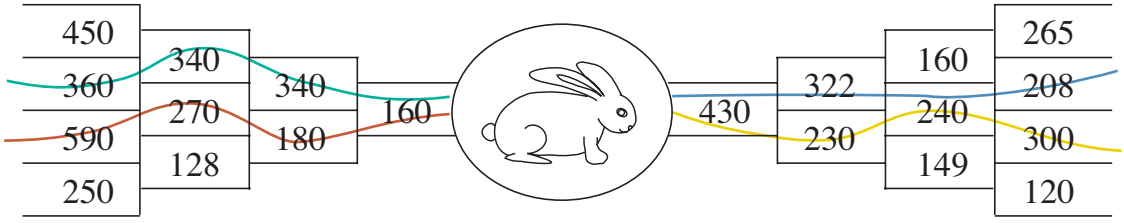
b) 540, 560, 580, 480, 500, 520, 400, 460

E.g:



2

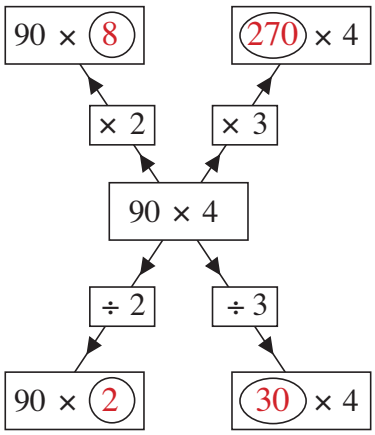
Bunny can only escape from the maze by passing through numbers which add up to 1200. Draw possible paths he could take. Use a different colour for each one.



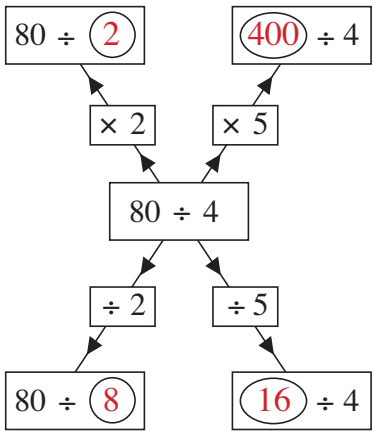
3

Fill in the missing numbers.

a)



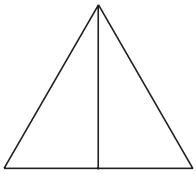
b)



4

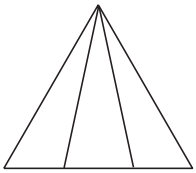
How many triangles can you see in each diagram?

a)



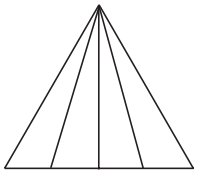
2 + 1 = 3

b)



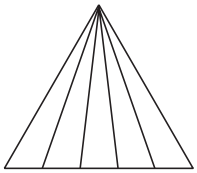
3 + 2 + 1 = 6

c)



4 + 3 + 2 + 1 = 10

d)



5 + 4 + 3 + 2 + 1 = 15

1

Change the lengths to the given units.

a) 18 cm = 180 mm

240 cm = 2400 mm

5 cm 30 mm = 80 mm

61 cm 9 mm = 619 mm

b) 242 mm = 24 cm 2 mm

480 mm = 48 cm 0 mm

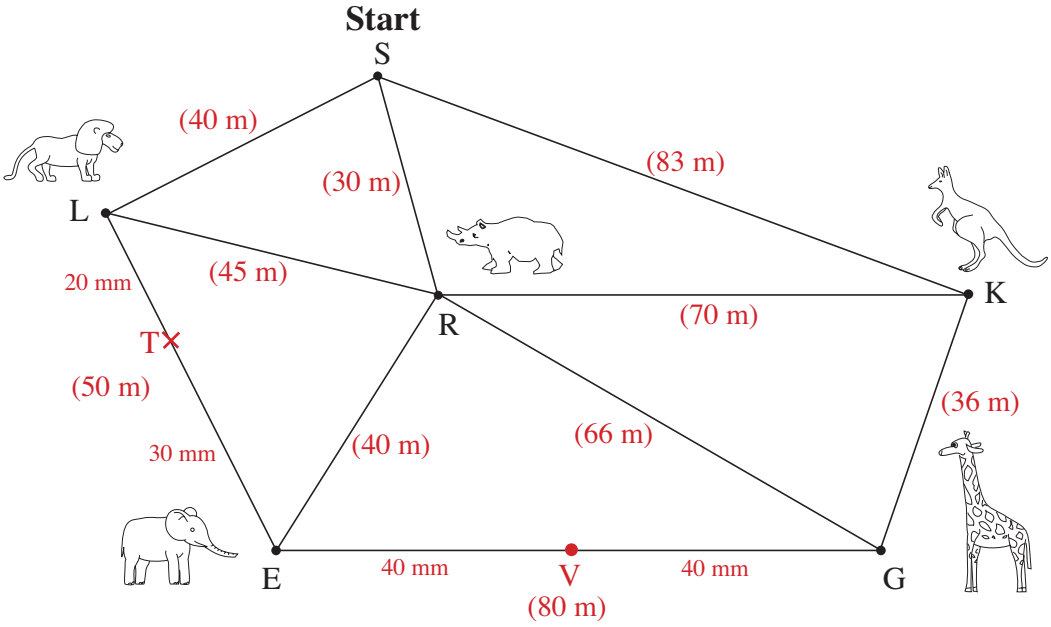
1263 mm = 126 cm 3 mm

4004 mm = 400 cm 4 mm

2

You are visiting a wildlife park and want to see all the animals.

This is the map of the park. *Scale*: 1 mm on the map → 1m in real life



a) Measure each line on the map and write the length beside it.

b) Calculate the distances in real life and write in brackets beside the lines.

c) Begin and end at **Start**. Write the letter of each animal to show the routes.

E.g: i) Find a route which allows you to visit all the animals. S R L E G K S

Total length = S R L E G K S = 324 m

E.g: ii) Try to find a route which is less than 310 metres. S L E G K R S

Total length = S L E G K R S = 306 m

d) i) The ice-cream van is half-way between the elephants and the giraffes. Draw a dot on the map to show it and label it V.

ii) The toilets are 30 m from the elephants on the road to the lions. Draw a cross on the map to show them and label it T.