1 In your exercise book, write these numbers as the sum of hundreds, tens, units, etc.

Example $605 = 6 \times 100 + 0 \times 10 + 5 \times 1 = 600 + 5$

a) 135 b) 309 c) 3245 d) 9280

2 In your exercise book, write these numbers in words.

a) 234 b) 1740 c) 2009 d) 3000

e) 4097 f) 8016 g) 9999 h) 7705

3 a) Write these numbers as digits.

i) Five thousand, three hundred and four = ...

ii) Three thousand, five hundred and four = ...

iii) Four thousand and five = ...

iv) 5 thousands + 2 hundreds + 3 tens + 4 units = ...

v) 4 thousands + 7 tens + 2 units = ...

vi) 23 units + 50 hundreds = ...

vii) 3 hundreds + 52 tens + 6 units = ...

viii) 5 thousands + 2 hundreds + 410 units = ...

b) List them in increasing order.

. . . . . .

4 Write these numbers in the place-value table.

a)

	TTh 10 000	Th 1000	H 100	T 10	U 1
5409					
9521					
1935					
2050					
5499					
5499 + 1					
5499 + 2					

b)

	TTh 10 000	Th 1000	H 100	T 10	U 1
35					
10 times 35					
100 times 35					
1000 times 35					

5 Write the next two terms in the sequence.

a) 413, 418, 423, 428, ..., ... b) 1200, 1100, 1000, ..., ...

1

a) In your exercise book, write these numbers in words.

i) 1240 ii) 324 iii) 2001 iv) 5430

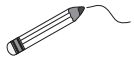
v) 10101 vi) 1027

b) List them in increasing order.

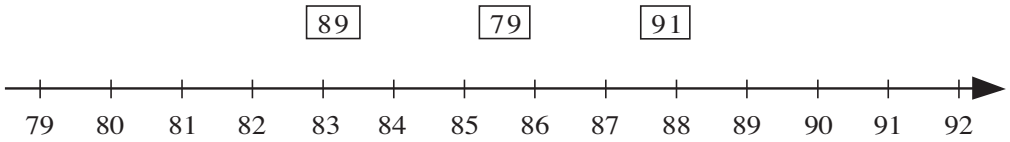
. . . . . .

2

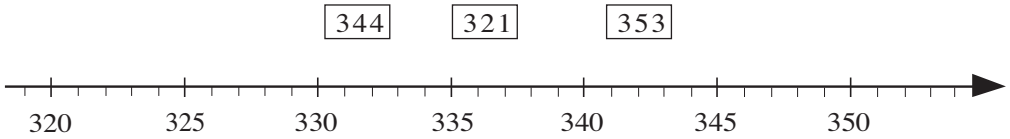
Join up each number to the corresponding point on the number line.



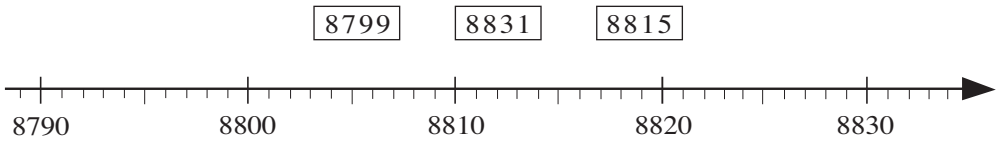
a)



b)



c)



3

a) Follow the pattern and complete the table.

b) Write a ≈ sign nearest the correct rounding to the nearest whole ten.

Next smaller ten	Number	Next greater ten
	3	
80	86 ≈	90
	392	
	4535	
	10324	

4

Round each number to the nearest whole ten and nearest whole hundred.

a) 299 ≈ ≈ b) 4604 ≈ ≈

c) 2875 ≈ ≈ d) 9048 ≈ ≈

5

Complete the statements.

a) 345 ☐ 410 b) 410 – 345 = ☐ c) 345 + ☐ = 410

d) 1320 ☐ 1120 e) 1320 – 1120 = ☐ f) 1120 + ☐ = 1320

g) 7479 < ☐ < 7485 ☐ : . . . . . .

1 Fill in the missing numbers.

a) $\square \times 10 = 230$ b) $75 \times \square = 7500$ c) $27 \times \square = 27\,000$

$120 \times \square = 1200$ $\square \times 100 = 2200$ $\square \times 100 = 7500$

$445 \times 10 = \square$ $120 \times 100 = \square$ $85 \times 100 = \square$

2 Fill in the missing numbers and signs.

a) $840 \div \square = 84$ b) $7200 \div \square = 72$ c) $9600 \div 100 = \square$

d) $\square \div 100 = 100$ e) $1720 \square 10 = 172$ f) $850 \square 10 = 8500$

g) $8500 \div \square = 85$ h) $\square \times 1000 = 34\,000$

3 Write multiplications and divisions about the tables.

a)

H Th	T Th	Th	H	T	U
				5	3
			5	3	0
		5	3	0	0
	5	3	0	0	0
5	3	0	0	0	0

$53 \times 10 =$

$53 \times 100 =$

b)

H Th	T Th	Th	H	T	U
8	0	7	0	0	0
	8	0	7	0	0
		8	0	7	0
			8	0	7

$807\,000 \div 10 =$

$80\,700 \div 100 =$

4 You have these number cards. 2 3 4 0 0 0

Use them to make, where possible, two different 6-digit numbers which are:

a) divisible by 10: ....

b) divisible by 10, but not by 100: ....

c) divisible by 100, but not by 10: ....

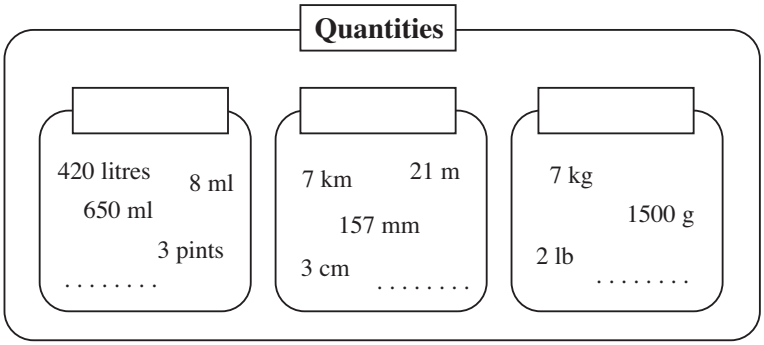
d) not divisible by 10: ....

1 Write the units of measure that you know in the correct place in the table.

Number of times, or the fraction of, the basic unit	1000	100	10	1	$\frac{1}{10}$	$\frac{1}{100}$	$\frac{1}{1000}$
Units of length				metre (m)			
Units of mass				gram (g)			
Units of capacity				litre (ℓ)			

2 a) Write a label for each set.

b) Add a quantity of your own to each set.



3 Convert the quantities.

a) 3 km = ☐ m

b) 12 km = ☐ m

c) 5 and a half km = ☐ m

d) 17 m 80 cm = ☐ cm

e) 3 half metres = ☐ cm

f) 3 quarters of a metre = ☐ cm

g) 5 m = ☐ mm

h) 32 m 4 cm = ☐ mm

i) 2 fifths of a metre = ☐ mm

j) 3000 ml = ☐ litres

k) 2500 ml = ☐ litres

l) 2500 cl = ☐ litres

m) 10 000 g = ☐ kg

n) 3500 g = ☐ kg

4 Fill in the missing items.

a) ☐ litres = 4000 ml = ☐ cl

b) 31 kg = ☐ g

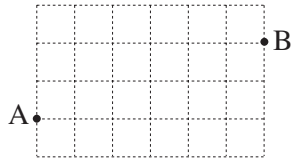
c) 70 m = 7000 ☐ = ☐ mm

d) ☐ cm = 13 m = 13 000 ☐

e) 3 000 000 g = 3000 ☐ = 3 ☐

f) 5000 ml = ☐ m = ☐ g (!)

1



a) How many units long is the shortest route from A to B along the grid lines?

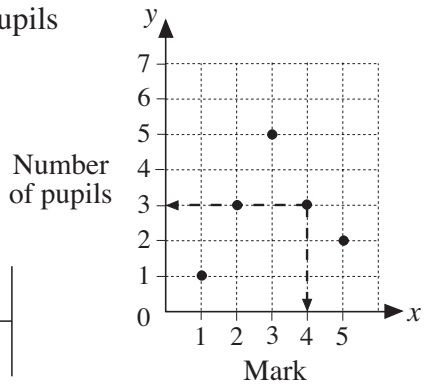
b) How many such routes can you find?

2

The graph shows the marks scored by a class of 14 pupils in a test which had 5 marks in total.

For example, 3 pupils scored 4 marks, or 4 marks were scored by 3 pupils.

So this data point has coordinates (4, 3).



a) Complete the table.

Mark	1	2	3	4	5
Number of pupils				3	

b) i) Which mark did most pupils score? This is the **mode**.

ii) How many pupils scored it?

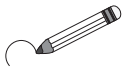
c) List the marks of every pupil in increasing order in your exercise book.

d) Calculate the **mean** in your exercise book and write it here.

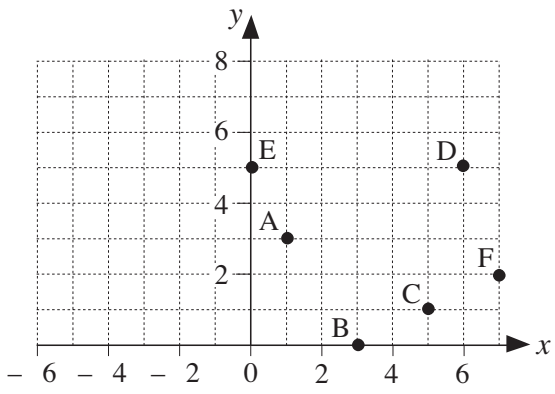
3

There are two mistakes in this graph.

Circle the incorrect points and draw them again in the correct position.



A (3, 1)
B (3, 0)
C (5, 1)
D (6, 5)
E (0, 5)
F (2, 7)



4

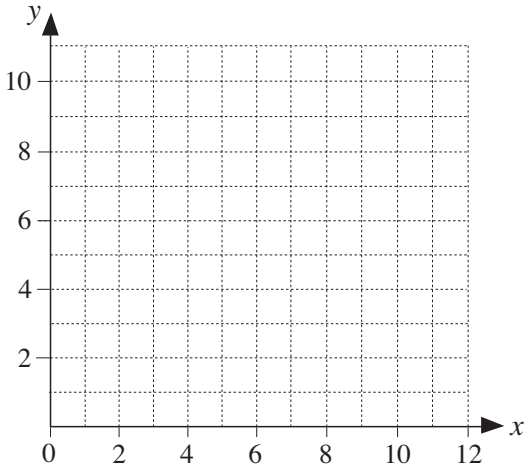
Mark these points with dots on the graph.

A (2, 8); B (7, 1); C (3, 3);

D (4, 0); E (6, 0); F (0, 0);

G (4 rounded to the nearest 10, 40 ÷ 10)

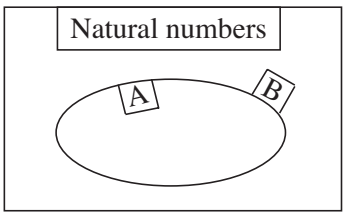
H (13 rounded to the nearest 10, 900 ÷ 100)



1

The base set contains the **natural** numbers.

Set A contains numbers less than 10.



a) List the elements of *Set A*.

$A = \{ \ldots\ldots\ldots\ldots\ldots\ldots\ldots\ldots \}$

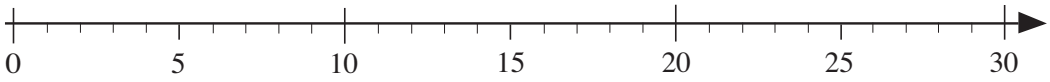
b) If the number of elements in *Set A* is n, complete this statement. n ☐ 10

c) List the elements in *Set B*. $B = \{$, . . . $\}$

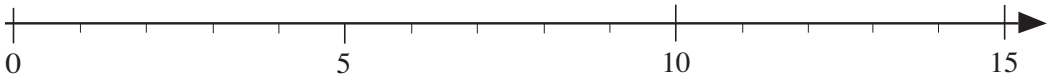
2

The base set is the set of **natural** numbers. Write an inequality about x, y and z using $<, >, \leq$ or $\geq$ and show it on the number line.

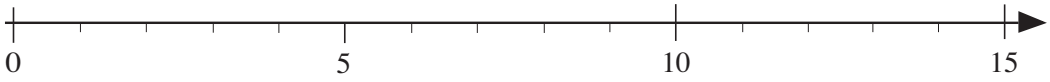
a) x is less than or equal to 17. .....



b) y is less than 8. .....

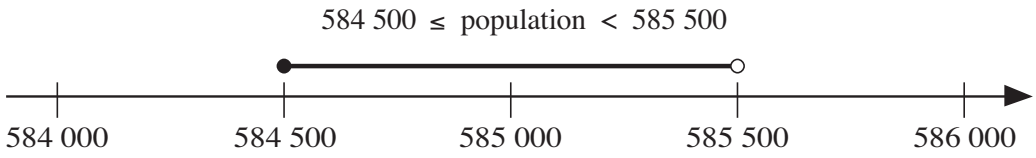


c) z is at least 7 and at most 10. .....



3

If the population of a country, rounded to the nearest 1000, is 585 000, then it means:



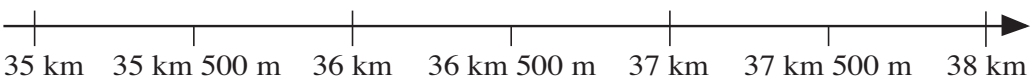
The **actual** population is a natural number somewhere on the segment shown.

a) Answer this question by writing an inequality.

The length of a room was measured as 530 cm, rounded to the nearest 10 cm. What could the actual measurement be?

. . . . . .

b) The distance from John's house to his work is 37 km, rounded to the nearest km. What could the actual distance be? Show it on the number line.



1 Write an operation for each problem and do the calculation.

a) 15 girls and 16 boys went on a trip. How many children went on the trip?

. . . . . .

b) The school organised two trips. 27 pupils went to Dartmoor, 9 less than those who went to Exmoor. How many pupils went to Exmoor?

. . . . . .

2 Do these calculations in your exercise book and write only the answers here.

a) $87 - 22 =$ b) $103 + 68 =$ c) $122 - 48 =$

d) $4013 + 482 =$ e) $500 + 600 + 900 =$

f) $3000 - 570 =$ g) $3072 + 8318 + 686 + 1324 =$

3 Do these calculations in your exercise book and write only the answers here.

a) $4400 + 600 + 960 + 1040 =$ b) $2050 - 580 =$

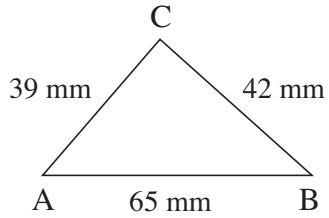
c) $7305 + 95 + 551 + 1049 =$ d) $6000 - 3700 =$

e) $2600 + 2040 + 25 + 375 =$ f) $3000 - 570 =$

g) $3072 + 8218 + 686 + 1324 =$ h) $1660 - 760 =$

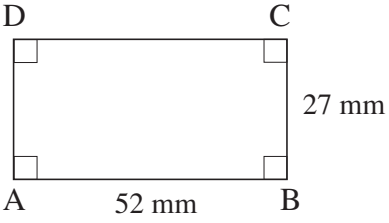
4 Calculate the perimeter of each polygon in your exercise book. Write the answer here.

a)



Not drawn to scale!

b)



$P =$ ..... $P =$ .....

5 Ann has £758, Betty has £1439 and Carol has £549. How much do they have altogether?

Estimate by rounding to the nearest £100, write the amounts in the place-value table, do the calculation and write the answer in a sentence.

E: .....

Answer: .....

.....

	Th	H	T	U
A				
B				
C				
Total				

1 Estimate first by rounding to the nearest 100, then calculate.

a) *E:* .....

	1	4	2
	3	1	3
+	4	4	1

b) *E:* .....

	1	5	2	6
	3	8	0	4
+	2	4	3	7

c) *E:* .....

		4	5	3
		7	0	9
+	3	4	5	6

d) *E:* .....

		3	5	6	7
				3	4
	1	1	5	8	9
+		9	0	7	8

2 Write each addition in column form, then do the calculation.

a) 345 + 276 + 516 + 1018

b) 2305 + 4076 + 291 + 1000

c) 5077 + 9246 + 260 + 8705

d) 1010 + 8 + 26 + 3004

e) Seven thousand, three hundred and fifteen
+ eight hundred and ninety-one
+ three hundred + fifty-five

3 Estimate first by rounding to the nearest 100, then do the calculation.

a) *E:* .....

	5	6	7
–	4	5	6

b) *E:* .....

	4	4	5	3
–		7	0	9

c) *E:* .....

	7	5	0	3	8
–		2	8	9	0

d) *E:* .....

	1	3	0	6	7
–		6	0	9	4

4 Write each subtraction in column form, then do the calculation.

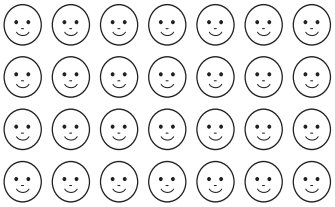
a) 5678 – 2451

b) 8636 – 3452

c) the difference between 8675 and 3456.

1

The pupils in a class are sitting in this formation. How many pupils are in the class?



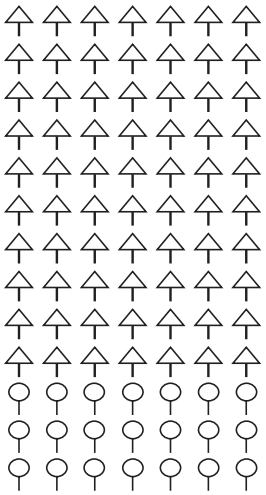
Write it as an addition and a multiplication in two ways.

7 + ... = ☐ × ☐ = ☐

4 + ... = ☐ × ☐ = ☐

Complete this sentence. The ☐ of a multiplication are interchangeable.

2



A farmer planted 10 rows of peach trees and 3 rows of cherry trees in his orchard. He planted 7 trees in each row. How many trees did he plant altogether?

Write different plans for calculating the answer.

3

Complete the multiplication table.

×	0	1	2	3	4	5	6	7	8	9	10	11	12
0	0	0	0	0	0	0	0	0	0	0	0		
1	0	1		3			6	7	8	9			12
2	0	2		6								22	
3	0	3		9			18	21	24	27			
4	0			12									
5	0			15									
6	0	6		18			36	42	48	54			
7	0	7		21			42	49	56	63			
8	0	8		24			48	56	64	72			
9	0	9		27			54	63	72	81			
10	0												
11		11											132
12			24							108			

4

Do these multiplications in a clever way in your exercise book.

a) 3 × 4 × 25 b) 5 × 63 × 20 c) 63 × 77 × 0 d) 1 × 2 × 4 × 8

e) 1 × 2 × 3 × 4 × 5 × 6 f) 5 × 2 × 7 × 2 × 7 × 5 g) 2 × 8 × 125 × 4

1 Do these calculations in a clever way.

a) $47 \times 6 =$ .....

b) $31 \times 19 =$ .....

c) $82 \times 13 =$ .....

d) $69 \times 20 =$ .....

e) $50 \times 4 \times 7 =$ .....

2 Write plans and do the calculations.

An intercity express train is travelling at an average speed of 110 km per hour.
A local train is travelling at an average speed of 70 km per hour.
Both trains take 7 hours to complete their journeys.

a) What distance do the two trains travel altogether?

.....

.....

b) How much further does the intercity express train travel?

.....

.....

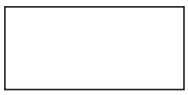
3 Calculate the perimeter and area of these polygons. (They are not drawn to scale.)

a)

P = ...

A = ...

b)



P = ...

A = ...

4 In this table, row *a* shows the length of a side of different squares and row *A* shows the area of the same squares.

Complete the table and write the rule.

a	1	2	3	4			7	8	9		11	12	
A	1	4	9		25	36				100			169

Rule: $A =$

1

Pete and Sue bought 5 bottles of juice and took back 5 empty bottles.

One bottle of juice cost 86 p but they got 6 p back for every empty bottle they returned.

Pete and Sue calculated how much they spent in different ways. Show how they did it.

Pete: . . . . Sue: . . . .

. . . .

. . . .

2

Calculate 327 × 6 in the place-value tables in two different ways.

Th	H	T	U	
	3	2	7	× 6

Th	H	T	U	
	3	2	7	× 6

3

Calculate 43 × 23 in the place-value tables in different ways.

a)

	H	T	U	
				← 43 × 20
+				← 43 × 3

b)

	H	T	U
		4	3
+			

×

T	U
2	3

c)

	H	T	U
		4	3
+			

×

T	U
2	3

4

Calculate these products in any way you wish.

a) 70 × 4 =
75 × 4 =
75 × 6 =
75 × 8 =
80 × 8 =

b) 82 × 10 =
82 × 9 =
82 × 5 =
82 × 50 =
82 × 500 =

c) 68 × 100 =
68 × 99 =
68 × 90 =
68 × 9 =
68 × 900 =

d) 25 × 8 =
250 × 8 =
25 × 80 =
25 × 800 =
25 × 160 =

Calculations:

1

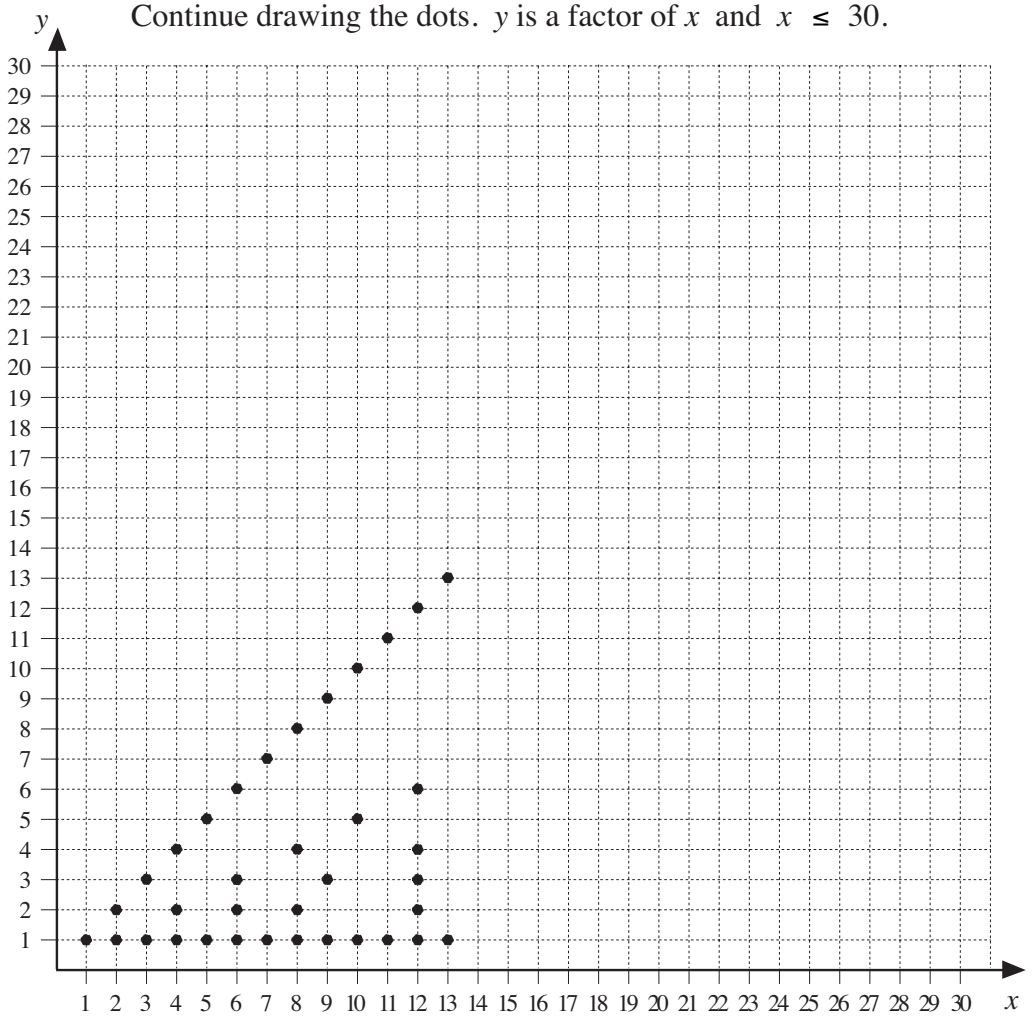
a) Complete the table to show how 24 flowers can be arranged in equal bunches.

Flowers per bunch	1	2	3	4			12	
Number of bunches	24	12			4	3		1

b) List the factors of 24. . . . . .

2

a) Continue drawing the dots. y is a factor of x and $x \leq 30$.



b) Complete these statements. i) x is a [ ] of y

ii) A = {has exactly two factors} = { . . . . . }

iii) B = {has an odd number of factors} = { . . . . . }

iv) C = {has only one factor} = { . . . . . }

3

The arrows point towards the multiples.

Continue drawing the arrows.

1 Fill in the missing numbers. If there is a remainder, write it beside the box.

a) $73 \div 7 =$ ☐ b) $83 \div 10 =$ ☐

c) $96 \div 16 =$ ☐ d) $144 \div$ ☐ $= 10, \text{r } 4$

e) $121 \div 10 =$ ☐ f) $66 \div 11 =$ ☐

2 Write these numbers in the correct set.

15 30 41 77 80 92 104 150 300

a) Divisible by 2

b) Multiple of 4

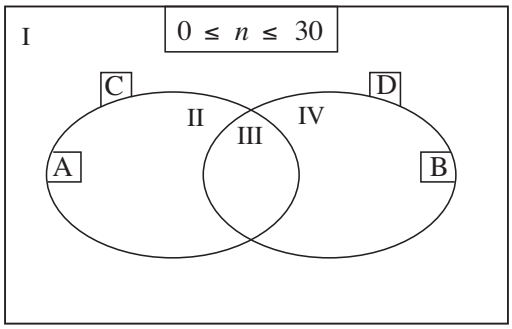
c) Divisible by 5

d) Multiple of 10

e) Divisible by 25

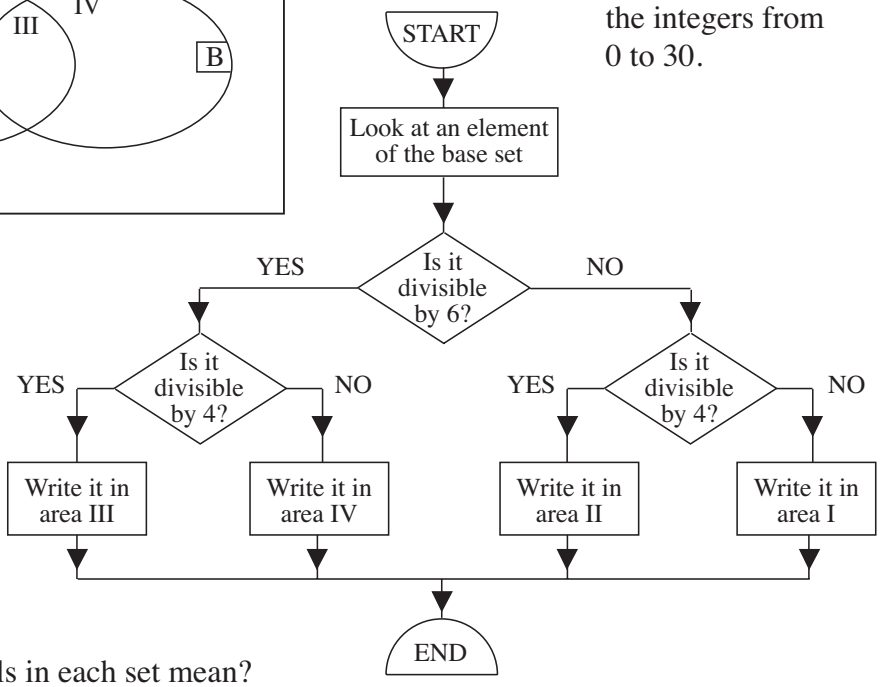
f) Multiple of 100

3



Fill in the **Venn** diagram by following the **flow chart**.

The base set contains the integers from 0 to 30.



What do the labels in each set mean?

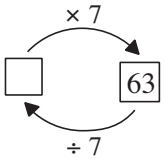
A = { . . . . . } C = { . . . . . }

B = { . . . . . } D = { . . . . . }

1 Solve the equations.

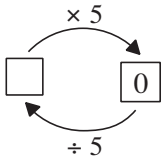
a) $\boxed{x} \times 7 = 63$

$x = \square$



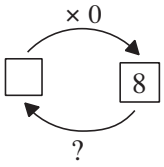
b) $\boxed{y} \times 5 = 0$

$y = \square$



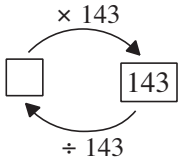
c) $\boxed{z} \times 0 = 8$

$z = \square$



d) $\boxed{u} \times 143 = 143$

$u = \square$



2 Fill in the missing numbers. Compare the results in each row.

a) $(12 + 10) \times 5 = \square$ $\quad 12 + 10 \times 5 = \square$ $\quad 12 \times 5 + 10 \times 5 = \square$

b) $32 \times 3 - 12 \times 3 = \square$ $\quad (32 - 12) \times 3 = \square$ $\quad 32 - 12 \times 3 = \square$

c) $72 \div 8 + 24 \div 8 = \square$ $\quad (72 + 24) \div 8 = \square$ $\quad 72 + 24 \div 8 = \square$

d) $(32 - 12) \div 4 = \square$ $\quad 32 \div 4 - 12 \div 4 = \square$ $\quad 32 - 12 \div 4 = \square$

e) $(42 - 10) + 5 = \square$ $\quad 42 - 10 + 5 = \square$ $\quad 42 - (10 + 5) = \square$

f) $(10 \times 8) \times (25 \times 8) = \square$ $\quad (10 \times 25) \times 8 = \square$ $\quad 10 \times 25 \times 8 = \square$

g) $42 \times 12 \div 3 = \square$ $\quad (42 \div 12) \times 3 = \square$ $\quad 42 \times (12 \div 3) = \square$

3 In November, a family spent £780 on heating and £1320 on food.

How much did the family spend on average on heating and food each day during that month?

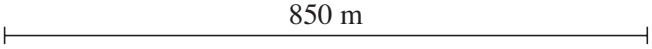
Plan: . . . . . *C*:

Answer: . . . . . .

4 a) Complete the diagram, then write a plan. Do the calculation and check the result.

Along an 850 m route a marker was placed at each 50 m.
How many markers were needed?

Diagram:



Plan: . . . . . *C:*

Answer: . . . . . .

b) How much time is needed to boil 16 eggs if it takes 4 minutes to boil one egg?

Answer: . . . . . .

1 Do the calculations (in your exercise book if you need more space) and write the results.

a) $36 \div 6 =$ b) $38 \div 19 =$ c) $480 \div 40 =$ d) $490 \div 7 =$

e) $51 \div 7 =$ f) $38 \div 6 =$ g) $420 \div 40 =$ h) $490 \div 80 =$

2 Do the calculations and check the results.

a)

3	8	9

$89 =$ ☐

b)

4	8	9

$89 =$ ☐

c)

5	8	9

$89 =$ ☐

d)

6	8	9

$89 =$ ☐

3 Do the calculations and check the results.

a)

7	9	6

b)

8	9	6

c)

2	1	5	9

d)

3	4	9	1

e)

9	4	9	1

Check:

4 Write a plan, do the calculation and check the result. Write the answer in a sentence.

A baker needs 7 kg of flour to make 175 rolls.

a) How many rolls can be made with 1 kg of flour?

b) How much flour is needed to make one roll?

1 Do the divisions in column form and check them.

a) $123 \div 9$ b) $123 \div 10$ c) $123 \div 11$ d) $123 \div 12$

2 Do the divisions and check them.

a) $6\overline{)9\,9\,8}$ b) $6\overline{)9\,9\,9}$ c) $6\overline{)1\,0\,0\,0}$ d) $6\overline{)1\,0\,0\,1}$ e) $6\overline{)1\,0\,0\,2}$

3 Do the divisions in any order you wish as quickly as you can in your exercise book. Write only the results here.

a) $983 \div 8 =$ b) $878 \div 9 =$ c) $789 \div 10 =$

d) $576 \div 70 =$ e) $576 \div 27 =$ f) $12\,121 \div 11 =$

4 In your exercise book, write a plan, do the calculation and check the result. Write the answer in a sentence here.

a) If I divided up my pocket money so that I had the same amount for 6 days, I would have 142 p each day and 3 p would be left over.

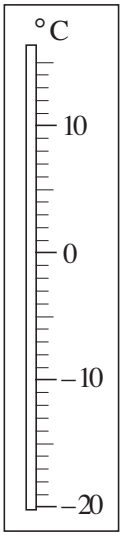
How much would remain if I divided up my pocket money equally over 7 days?

Answer: . . . . . .

b) I bought a length of material for £48 60 p. If it cost £1 80 p per metre, how many metres did I buy?

Answer: . . . . . .

1 Use the thermometer diagram to help you work out how the temperatures change.



a) The temperature is $-3°C$, *New temperature*

then: i) it rises by $2°C$ . . . . . .

ii) it rises by $3°C$ . . . . . .

iii) it rises by $10°C$ . . . . . .

iv) it falls by $2°C$ . . . . . .

b) The temperature is $3°C$,

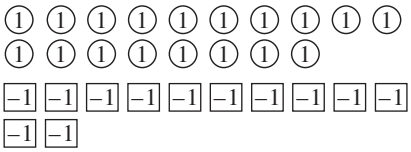
then: i) it falls by $2°C$ . . . . . .

ii) it falls by $3°C$ . . . . . .

iii) it falls by $10°C$ . . . . . .

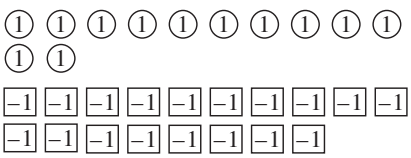
2 Write each person's balance as one amount of money.

a) Mike has £18 in cash and is £12 in debt.



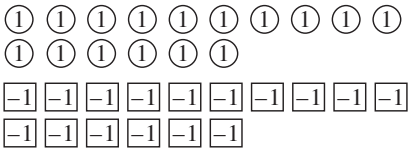
Balance ☐

b) Nick has £12 in cash and is £18 in debt.



Balance ☐

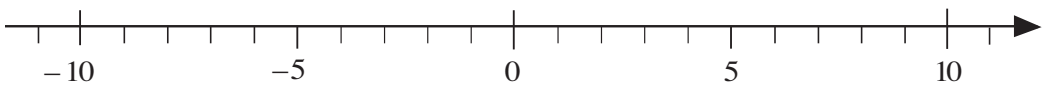
c) Luke has £16 in cash and is £16 in debt.



Balance ☐

3 a) Mark the **opposite** numbers of this set on the number line.

$\{-7,\ 10,\ 0,\ 11,\ -10,\ 5,\ 7\}$



b) Write the actual values in the boxes, then write their **opposite** values beside them.

i) $-(+7) =$ ☐ . . . ii) $-(-3) =$ ☐ . . . iii) $-(0) =$ ☐ . . .

4 a) 1, 2, 3, 4, 5, . . . are ☐ whole numbers or ☐ numbers.

b) $-1, -2, -3, \ldots$ are ☐ whole numbers.

1

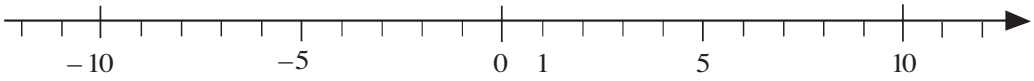
a) Mark the terms of this sequence in *red* on the number line.

The first term is -8. The following terms are 3 more than the previous term.

b) Mark the terms of this sequence in *blue*.

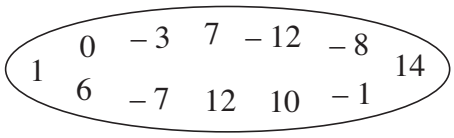
The first term is +10. The following terms are 4 less than the previous term.

c) Mark the numbers exactly divisible by 3 in *green*.



2

From this set:



a) list the numbers less than – 1 . . . . . .

b) list the numbers not more than 1 . . . . . .

c) list the numbers more than or equal to -7 . . . . . .

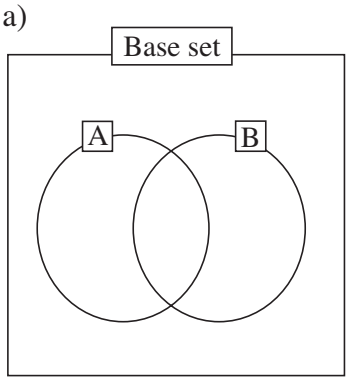
d) list the pairs of opposite numbers. . . . . .

3

The base set is : $U = \{-5, -4, -3, -2, -1, 0, 1, 2, 3, 4, 5\}$

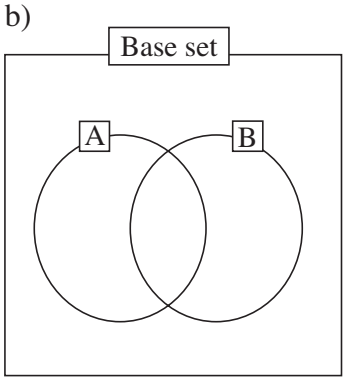
Write the numbers in the Venn diagrams.

a)



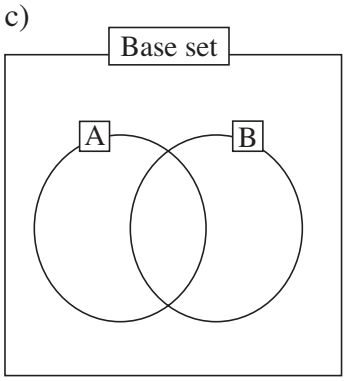
A = {negative numbers}
B = {positive numbers}

b)



A = {at least zero}
B = {at most zero}

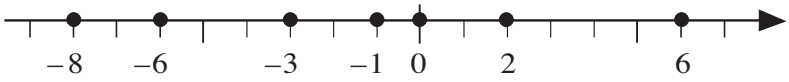
c)



A = {more than – 3}
B = {less than 4}

4

Put the numbers marked in order.



a) ☐ < ☐ < ☐ < ☐ < ☐ < ☐ < ☐

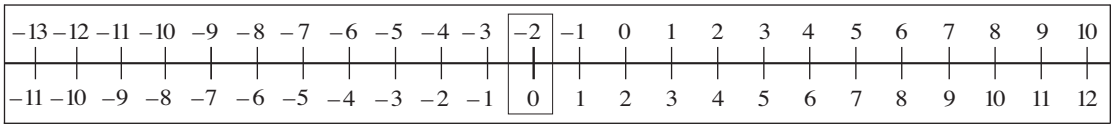
b) ☐ > ☐ > ☐ > ☐ > ☐ > ☐ > ☐

1 Work out the rule and complete the table. Write the rule in different ways.

a	2	−1	2	5	−3		4	0	7	−4	
b	5	−4	−6	0	3	1		−8		11	−4
c	7	−5	−4			8	−3		0		2

Rule: $c =$ $a =$ $b =$

2 Use this counting strip to help you work out the sums and differences.



$3-1=$	$2-0=$	$5-3=$	$9-7=$	$12-10=$
$1-(-1)=$	$0-(-2)=$	$-1-(-3)=$	$-2-(-4)=$	$-3-(-5)=$
$2-4=$	$3-5=$	$6-8=$	$1-3=$	$0-2=$
$-1-1=$	$-2-0=$	$-3-(-1)=$	$-5-(-3)=$	$-8-(-6)=$
$2+3=$	$2+5=$	$2+10=$	$2+(-2)=$	$2+(-5)=$
$-2+0=$	$-2+1=$	$-2+2=$	$-2+3=$	$-2+7=$
$-2+(-1)=$	$-2+(-2)=$	$-2+(-5)=$	$-2+(-9)=$	$-2+(-4)=$

3 Work out the rule and complete the table. Fill in the word missing from the statement.

x	5	6	−2	5	−2	4	2	8	−3	3	−2	−5	6
y	5	3	0	−2	5	9	−5	−8	10	−10	−5	−2	−6
z	0	3	2	7	7								

z is the ☐ between x and y

4 Solve the inequalities if the solutions are integer numbers.

a) $\square \geq -5$ ☐ : .....

b) $\triangle < 3$ △ : .....

c) $-5 < \cap < 2$ ∩ : .....

d) $-7 <$ ⋈ and ⋈ < -1 ⋈ : .....

e) $2 <$ ✡ or ✡ < -3 ✡ : .....

1 Work out the rule and complete the table. Write the rule in different ways.

a	– 5	3	– 2	6	– 1		0		11	– 44
b	5	– 3	2			– 8		3		

b = a = $a + b$ =

2 Work out the rule and complete the table. Fill in the words missing from the statement.

x	– 7	– 6	– 5			– 2		0	1	2	3		5
y	7	6		4	3		1		1	2		4	

y is the ☐ of x from ☐

3 Decide whether the statement is true or false and write a ✓ or a × in the box.

a) Any integer number is greater than its opposite number. ☐

b) There is a number which is greater than its opposite number. ☐

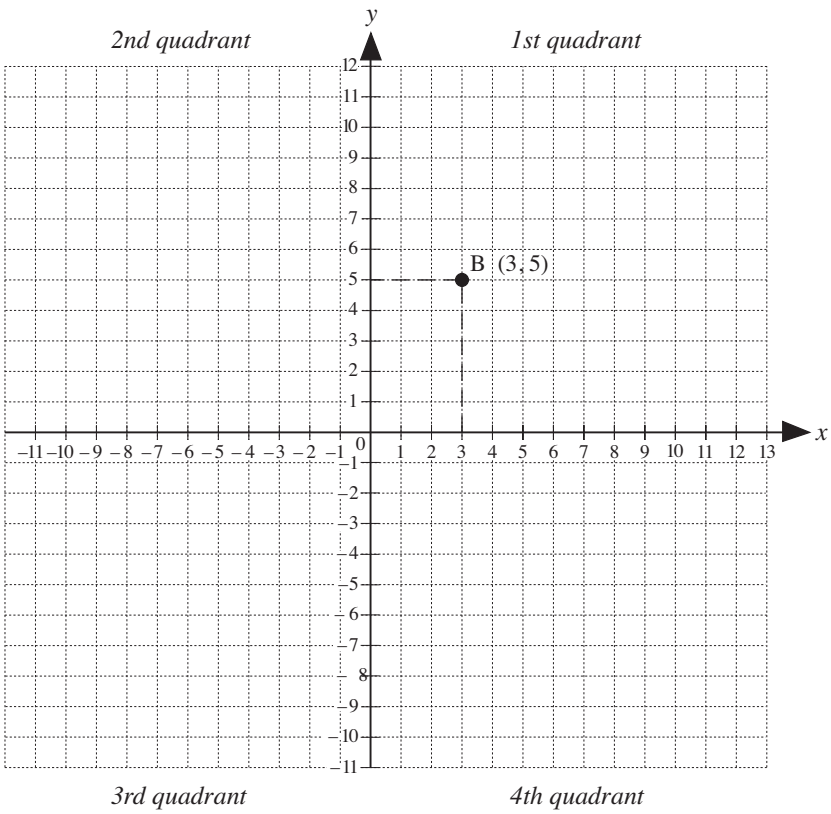
c) There is a number which is as far from 5 as it is from the opposite of 5. ☐

d) The greater of two negative numbers is the number closer to zero. ☐

4 a) Plot these points on the graph.

A (0, 8)
B (3, 5)*
C (5, 3)
D (8, 0)
E (0, 0)

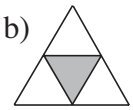
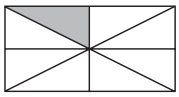
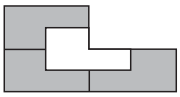
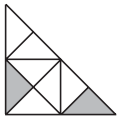
* already drawn



b) Plot all the points which are 5 units from the y-axis and 3 units from the x-axis.

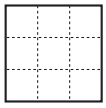
c) Plot all the points which are 3 units from the y-axis and 5 units from the x-axis.

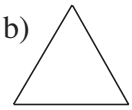
1 What part of the shapes are shaded?

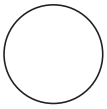
a)  b)  c)  d)  e)  f) 

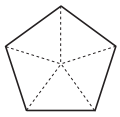
....

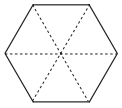
2 Colour the given fraction of each shape.

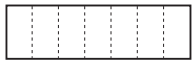
a)  $\frac{1}{3}$

b)  $\frac{1}{2}$

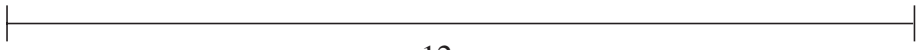
c)  $\frac{3}{4}$

d)  $\frac{2}{5}$

e)  $\frac{5}{6}$

f)  $\frac{3}{7}$

3 a) Draw lines which are: i) $\frac{1}{6}$ ii) $\frac{5}{6}$ iii) $\frac{7}{6}$ of the length of this 12 cm line segment.



i) .....

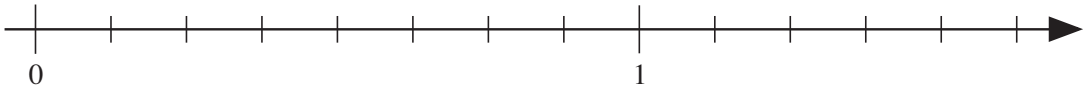
ii) .....

iii) .....

b) Write their lengths below the lines.

4 Mark the positions of these fractions on the number line.

$\frac{1}{8}$, $\frac{1}{2}$, $\frac{3}{4}$, $\frac{7}{8}$, $\frac{9}{8}$, $\frac{5}{4}$, $\frac{5}{8}$, $\frac{12}{8}$



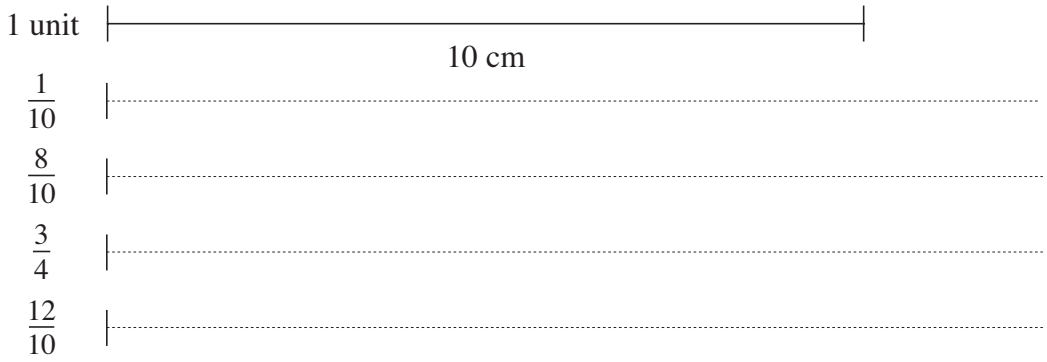
5 Which would give you more chocolate?

$\frac{3}{8}$ of one bar or $\frac{1}{8}$ of 3 bars

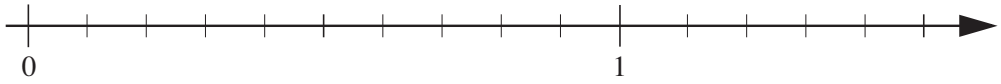
Answer: .....

1

a) Use a ruler to draw the required parts of this 10 cm line segment.



b) Mark the fractions on the number line.



2

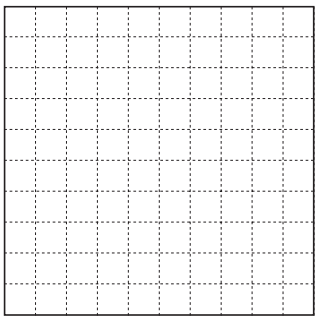
Colour:

a) $\frac{1}{10}$ of the square in *red*

b) $\frac{30}{100}$ of the square in *blue*

c) $\frac{2}{5}$ of the square in *yellow*

d) $\frac{13}{100}$ of the square in *green*.



$\frac{1}{10} = \frac{\quad}{100}$

$\frac{2}{5} = \frac{\quad}{10} = \frac{\quad}{100}$

What part is not coloured? . . . . . .

3

In your exercise book, calculate these parts of a 72 cm line segment and write the lengths in the boxes.

a) $\frac{2}{6}$ ☐ b) $\frac{5}{6}$ ☐ c) $\frac{9}{6}$ ☐

4

Write an operation for each part. Give the answer as a fraction or a whole number.

a) One seventh of three units: . . . . . .

b) The ratio of 3 to 10: . . . . . .

c) $\frac{3}{4}$ of 100: . . . . . .

d) The ratio of 15 to 8: . . . . . .

e) 1 fifth of 1 third of 1 unit: . . . . . .

f) 1 third of 1 fifth of 1 unit: . . . . . .

g) 32 divided by 100: . . . . . .

1 Write the decimal numbers in the place-value table, then write the numbers as the sum of a whole number and a fraction.

		Th	H	T	U	t	h	th
a)	16.07							
b)	518.26							
c)	1001.108							
d)	0.058							

$16 + \frac{7}{100} = 16\frac{7}{100}$

2 Write these numbers as decimals. Do necessary calculations in your exercise book.

a) $\frac{35}{10} =$ b) $\frac{7}{100} =$ c) $\frac{1003}{100} =$

d) $\frac{1003}{10} =$ e) $\frac{89}{10} =$ f) $83 + \frac{7}{10} =$

g) $\frac{3}{100} =$ h) $\frac{68}{100} =$ i) $\frac{527}{100} =$

j) $1 + \frac{1}{2} =$ k) $15 + \frac{2}{5} =$ l) $\frac{1}{4} =$

m) $\frac{6}{20} =$ n) $143 + \frac{17}{50} =$ o) $2\frac{3}{4} =$

3 Write these decimals as fractions.

a) 3.01 = b) 0.07 = c) 103.9 = d) 0.20 =

e) 20.8 = f) 101.101 = g) 30.3 = h) 1614.85 =

4 Express these measures as decimals.

a) 1 cm = ☐ m b) 3 m 5 cm = ☐ m c) 10 g = ☐ kg

d) 2 m 12 mm = ☐ cm = ☐ m e) 58 ℓ 18 cl = ☐ ℓ

f) 28 kg 300 g = ☐ kg g) 3 hours 6 minutes = ☐ hours

5 Express these amounts as:

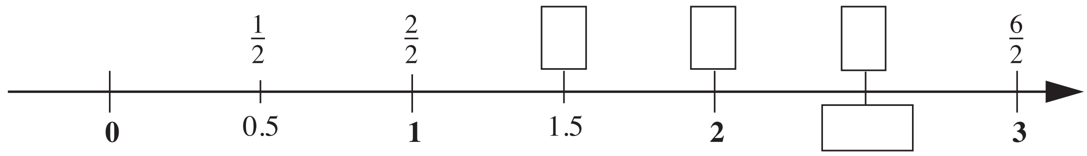
a) decimals: i) £2 31 p = £ ☐ ii) 1810 p = £ ☐

iii) £61 50 p = £ ☐ iv) 44 999 p = £ ☐

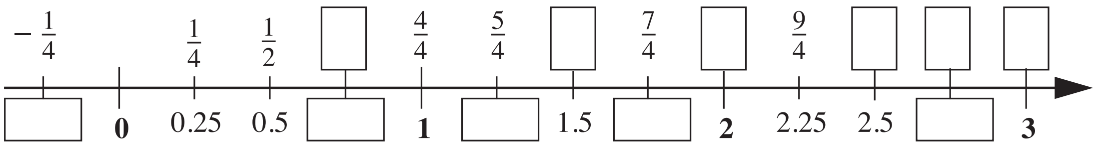
b) £s and pence: i) £18.04 = £ ☐ ☐ p ii) 6549 p = £ ☐ ☐ p

1 Fill in the missing numbers.

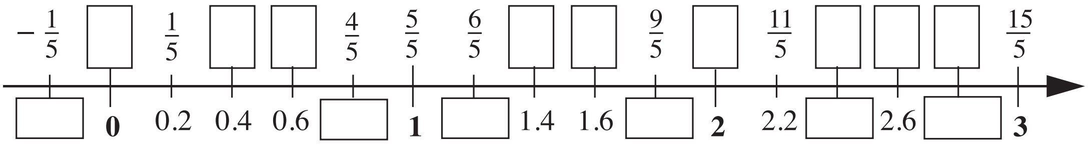
a)



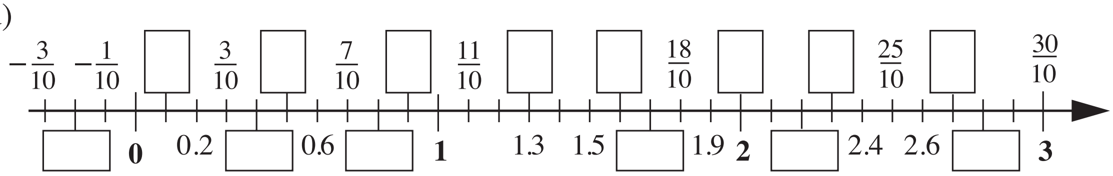
b)



c)



d)



2 Write the decimals as fractions with denominator 100. Fill in the missing signs.

a) 0.6 ☐ 0.06 $\quad \frac{\square}{100}$ ☐ $\frac{\square}{100}$

b) 0.7 ☐ 0.70 $\quad \frac{\square}{100}$ ☐ $\frac{\square}{100}$

c) 0.12 ☐ 0.1 $\quad \frac{\square}{100}$ ☐ $\frac{\square}{100}$

d) 1.03 ☐ 1.04 $\quad \frac{\square}{100}$ ☐ $\frac{\square}{100}$

e) 0.04 ☐ 0.3 $\quad \frac{\square}{100}$ ☐ $\frac{\square}{100}$

f) 2.3 ☐ 2.29 $\quad \frac{\square}{100}$ ☐ $\frac{\square}{100}$

3 Write three numbers which are between each given pair.

a) 5.3 <   <   <   < 5.5   b) 0.6 <   <   <   < 0.7

c) 1.9 <   <   <   < 2   d) 1.5 <   <   <   < 1.51

4 Write the numbers in increasing order.

a) 0.2, 0.202, 2.02, 2.22, 20.2, 20.02, 2.002, 202.2

. . . .

b) 0.001, −1, −1.01, −1.11, 0.1, −1.1, −10.1, 1.11

. . . .