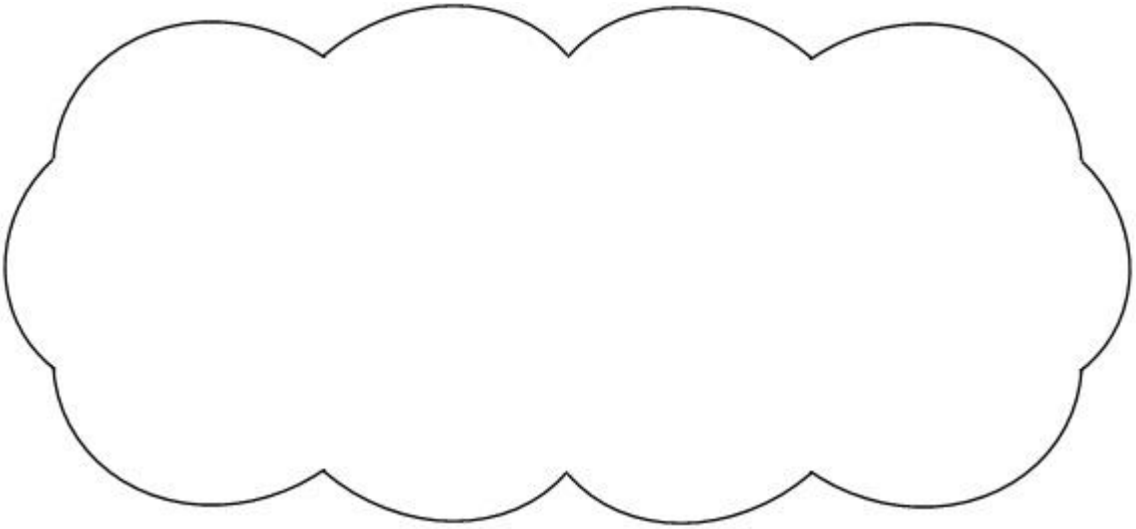
Q1.

Circle the **prime** number.

95 89 87

Explain how you know the other numbers are **not** prime.



1 mark

Q2.

Tick the numbers that are common factors of both **12 and 18**

2 ☐

3 ☐

6 ☐

9 ☐

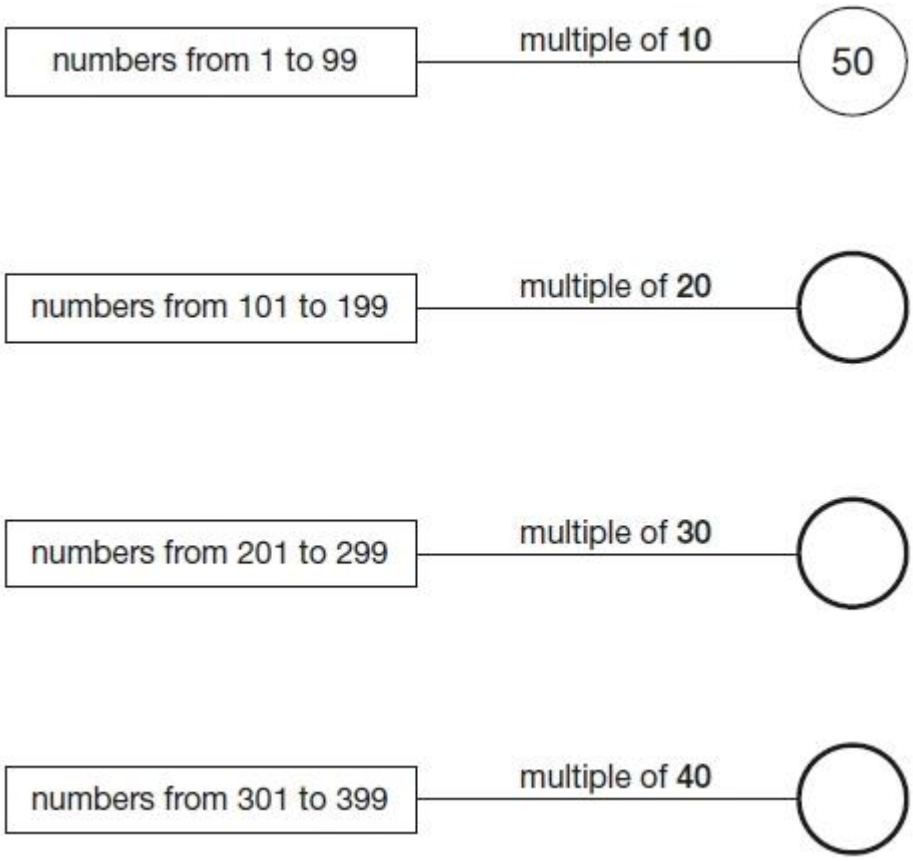
12 ☐

2 marks

Q3.

In the circles, write a multiple that belongs to each set.

One has been done for you.



2 marks

Q4.

The numbers in this sequence increase by 10 each time.

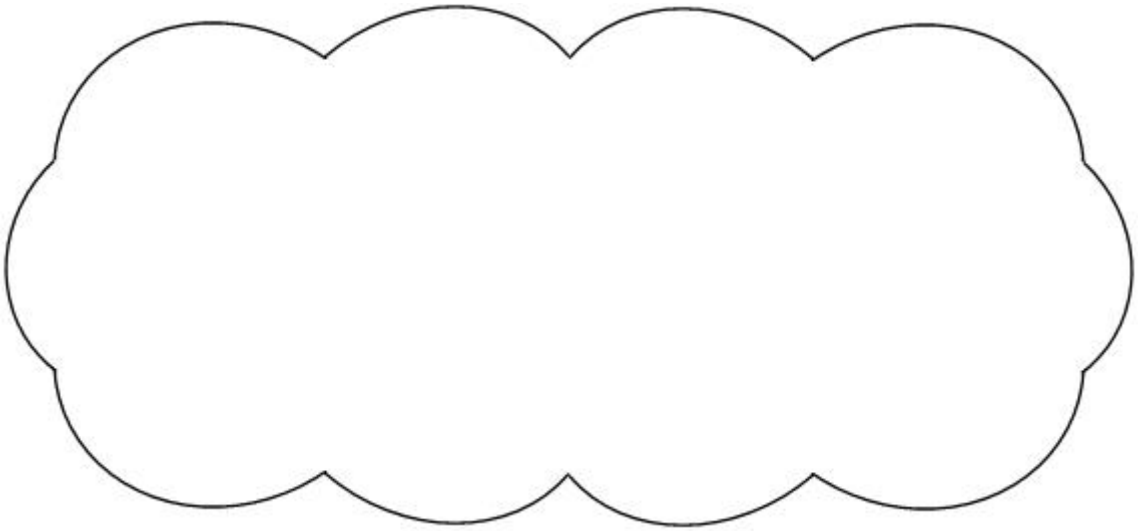
3 13 23 …

The sequence continues in the same way.

Write **two** numbers from the sequence that add to make a total of **96**

1 mark

Explain why it is **not** possible to find **three** numbers from the sequence that add to make a total of **96**



1 mark

Q5.

The numbers in this sequence increase by 3 each time.

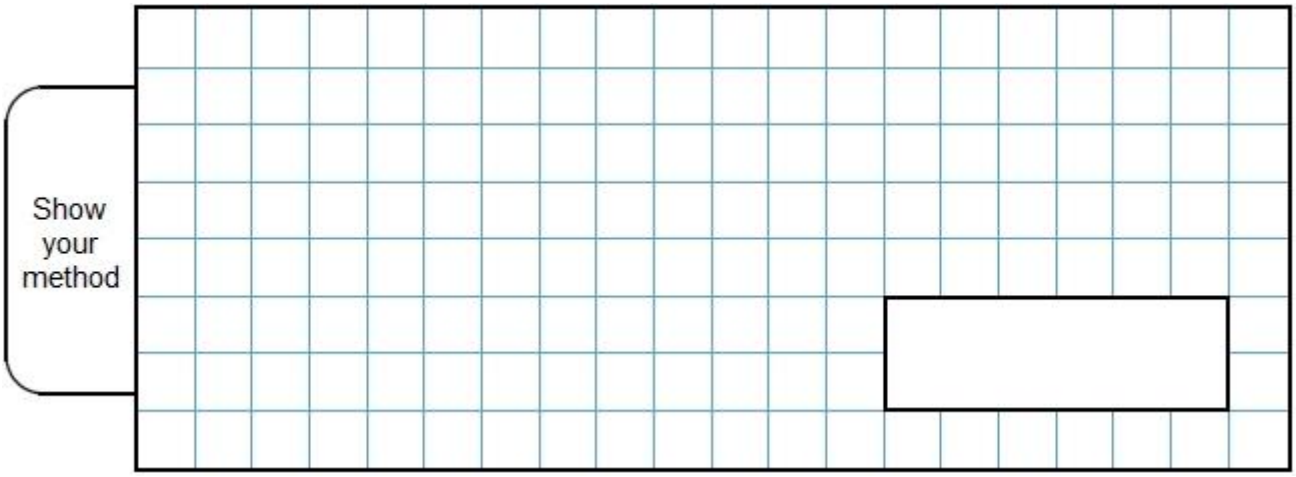
3 6 9 12 . . .

The numbers in this sequence increase by 5 each time.

5 10 15 20 . . .

Both sequences continue.

Write a number **greater than 100** which will be in **both** sequences.

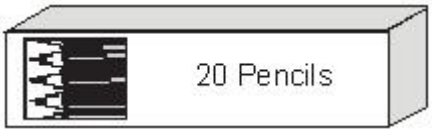


2 marks

Q6.

50 children need **two** pencils each.

There are 20 pencils in a box.

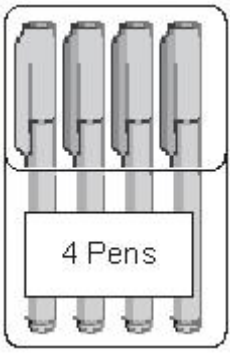


How many boxes of pencils are needed?

boxes

1 mark

50 children need **one** pen each.



Pens are sold in packs of 4

How many packs of pens need to be bought?

packs

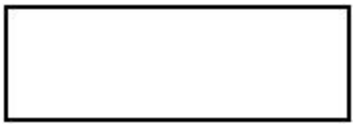
1 mark

Q7.

Here is a sorting diagram with four sections, **A**, **B**, **C** and **D**.

	multiple of 10	not a multiple of 10
multiple of 20	**A**	**B**
not a multiple of 20	**C**	**D**

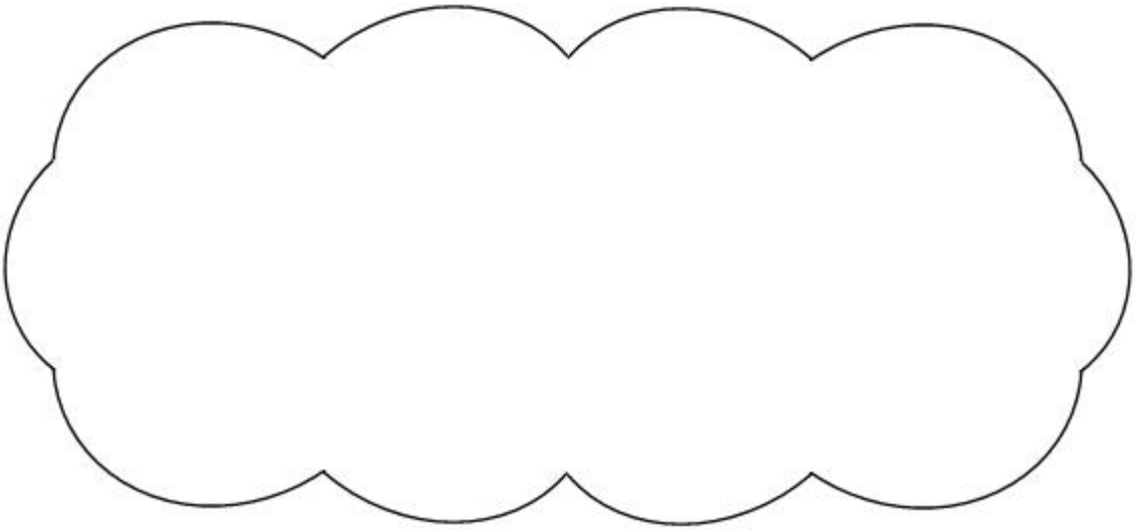
Write a number that could go in section **C.**



1 mark

Section **B** can never have any numbers in it.

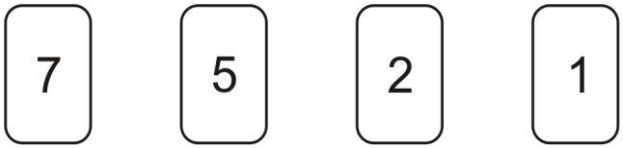
Explain why.



1 mark

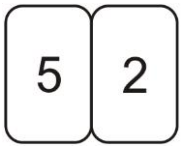
Q8.

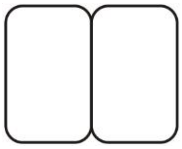
Here are four digit cards.

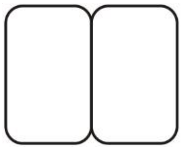


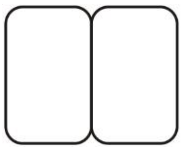
Choose two cards each time to make the following two-digit numbers.

The first one is done for you.

an even number 

a multiple of 9 

a square number 

a factor of 96 

2 marks

Q9.

Here is a diagram for sorting numbers.

Write **one number** in each white section of the diagram.

	less than 1000	1000 or more
multiples of 20		
not multiples of 20		

2 marks

Q10.

Write in the missing number.

160 ÷ ☐ = 8

1 mark

Q11.

Write the missing numbers.

Factors of 20 = {1, _____ , _____ , _____ , _____ , 20}

1 mark

Q12.

Circle **one number** on the grid which can be **divided by 9** with a **remainder of 1**

97	98	99
107	108	109
117	118	119

1 mark

Q13.

Here are three digit cards

1	5	6

Choose two cards each time to make the following two-digit numbers.

The first one is done for you.

an even number	5	6
an prime number		
a common factor of 60 and 90		
a common multiple of 5 and 13		

2 marks

Q14.

The factor pairs of 8 are

1	and	8	
2	and	4	

Write all the factor pairs of 42

1	and	42	
2	and		
	and		
6	and		

2 marks

Q15.

1 and 48 is factor pair of 48

Find three other factor pairs of 48

☐ and ☐

☐ and ☐

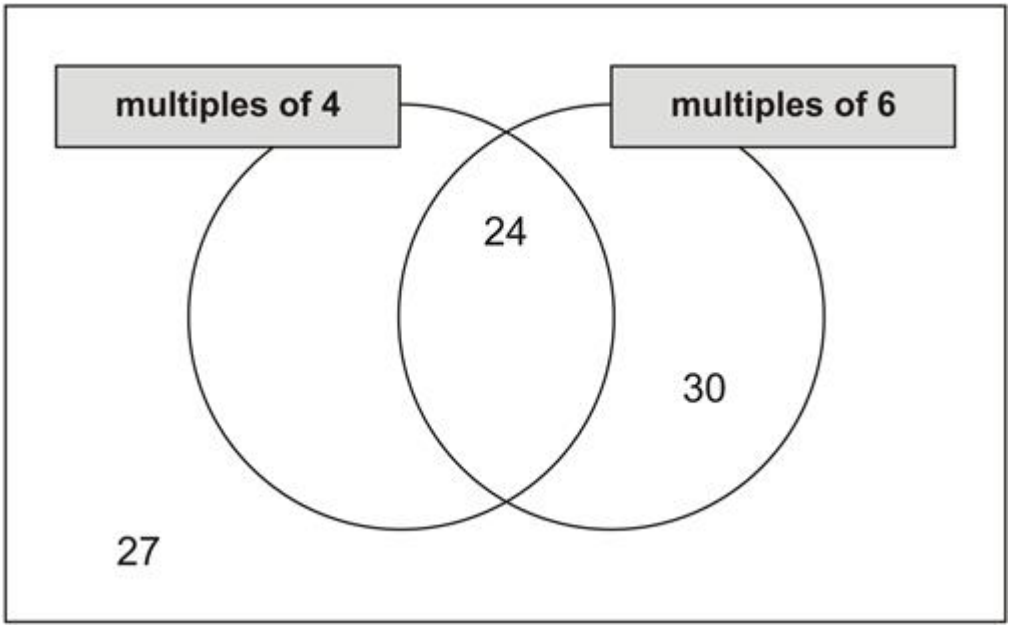
☐ and ☐

2 marks

Q16.

Write these numbers in the correct places on this sorting diagram.

16 26 36

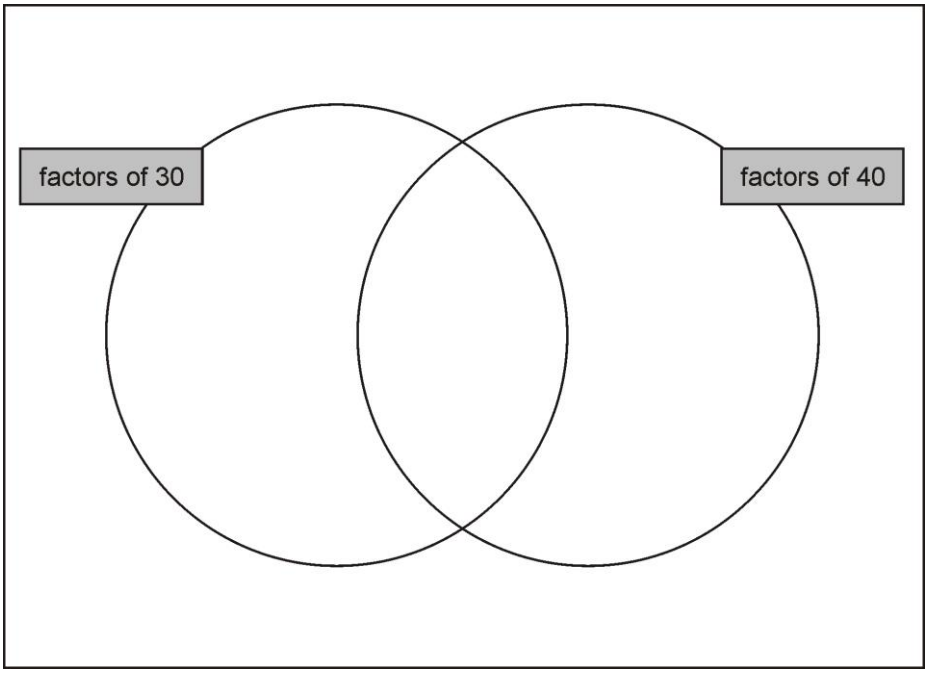


2 marks

Q17.

Write these numbers in the correct places on the diagram.

5 **6** **7** **8**



2 marks

Q18.

Write the two other **prime numbers** that multiply to make 165

5 × ☐ × ☐ = 165

1 mark

Q19.

Tick the correct phrase to complete the sentence.

A number that is not prime is called a _____

prime factor ☐

square number ☐

composite number ☐

common factor ☐

1 mark

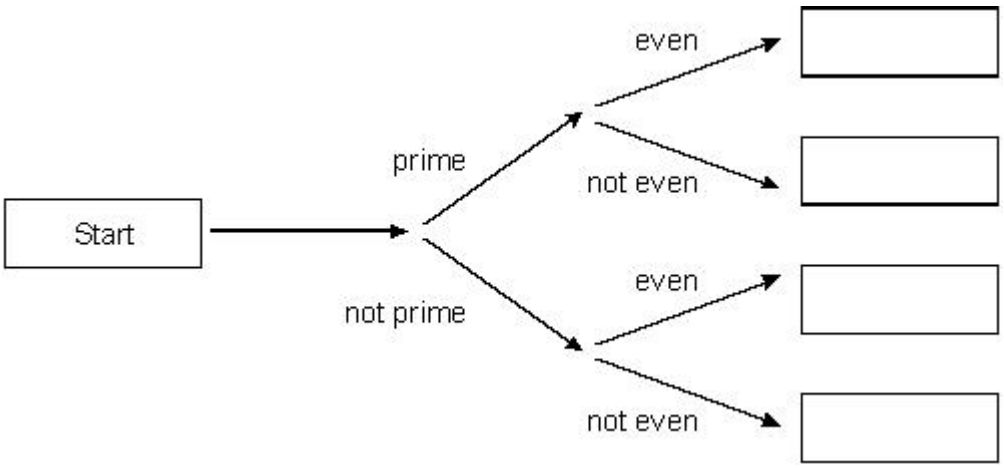
Q20.

Here is a diagram for sorting numbers.

Write these three numbers in the correct boxes.

You may not need to use all of the boxes.

9 17 20



2 marks

Q21.

Here is a sorting diagram for numbers.

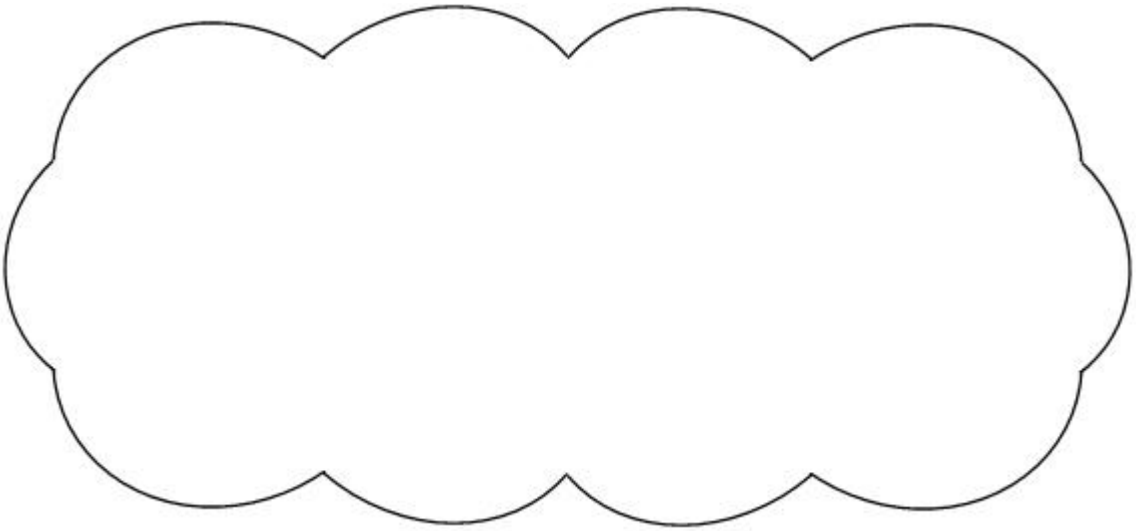
Write a number less than 100 in each space.

	even	**not** even
a cube number		
not a cube number		

2 marks

Q22.

Explain why 125 is a **cube** number.



1 mark