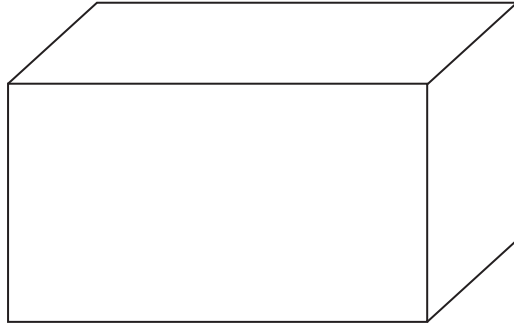


Answer **all** questions in the spaces provided.

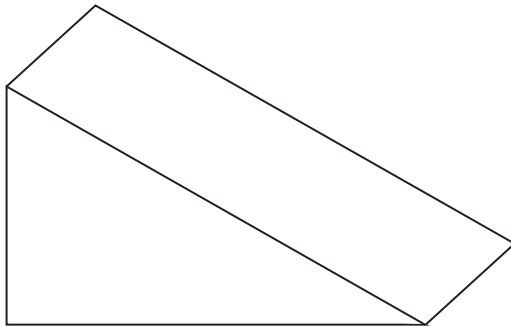
**1** This is a cuboid.



**1 (a)** How many faces does this cuboid have?

Answer ..... (1 mark)

**1 (b)** The cuboid is cut in half through four of its corners.  
The shape shows one-half of the cuboid.



**1 (b) (i)** How many rectangular faces does this shape have?

.....

Answer ..... (1 mark)

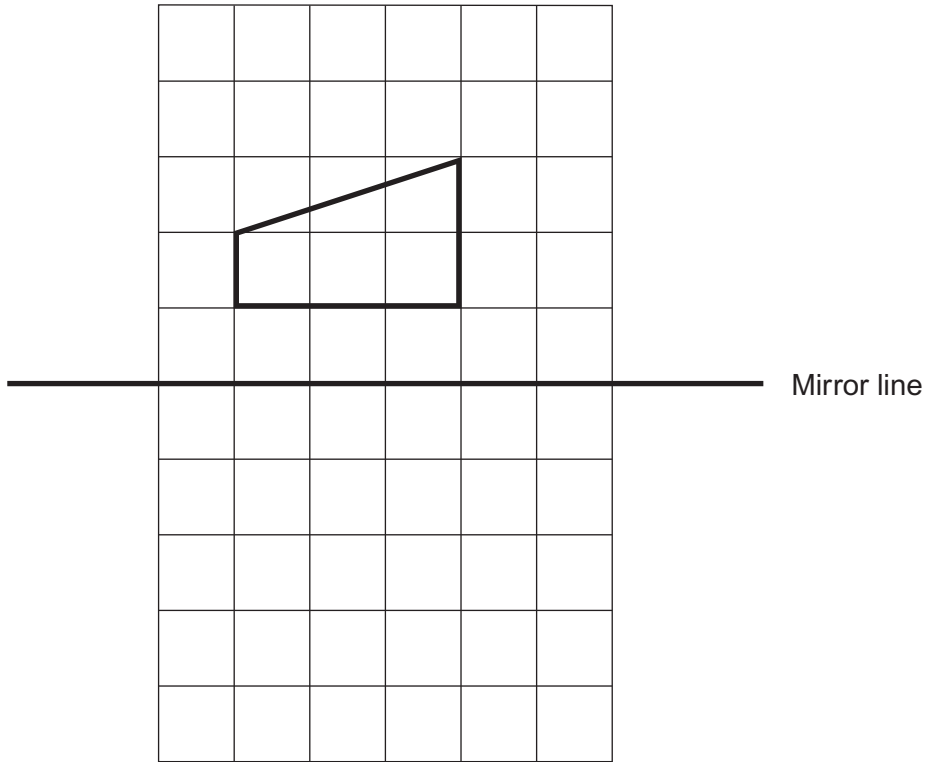
**1 (b) (ii)** How many triangular faces does this shape have?

.....

Answer ..... (1 mark)



2 Reflect the shape in the mirror line.



(2 marks)



- 3** There are eight students in a group.  
The table gives their names and dates of birth.

Name	Date of Birth
Susan	15 February 1997
Matthew	16 December 1996
Fred	20 September 1996
Khalid	4 June 1997
Surjit	30 July 1997
Abigail	17 December 1996
Cathy	5 February 1997
Pauline	22 November 1996

- 3 (a)** Who is the oldest student in the group?

.....

Answer ..... (1 mark)

- 3 (b)** Whose birthday is one day after Matthew's birthday?

.....

Answer ..... (1 mark)

- 3 (c)** A new student, Kelly, joins the group.  
Her birthday is exactly one month after Cathy's birthday.

What is her date of birth?

.....

Answer ..... (1 mark)



4 (a) Write the number 65 004 in words.

Answer ..... (1 mark)

4 (b) Write the number seven thousand and twenty four in figures.

Answer ..... (1 mark)

4 (c) Some of the factors of a number are 1, 2, 3 and 4.

What is the smallest possible number?

.....  
.....

Answer ..... (1 mark)

4 (d) Jack is thinking of a number.

The number is  
between 10 and 20

The number is  
odd

The number is a  
multiple of 3

What is the number?

.....  
.....

Answer ..... (2 marks)



5 Complete the shopping bill.

	Cost
1.52 kg of bananas at 75p per kg	
4 tins of dog food at 87p per tin	
<b>Total</b>	

.....  
 .....  
 .....  
 ..... (3 marks)

6 These are the names of 12 students in a class.

- |       |        |         |       |
|-------|--------|---------|-------|
| Alan  | Chris  | Kiki    | Tom   |
| Brian | Chris  | Mohamed | Wayne |
| Chris | Denise | Sharon  | Wayne |

6 (a) Which name is the mode?

.....  
 Answer ..... (1 mark)

6 (b) One student now leaves the class and another student joins the class. The mode is now Wayne.

6 (b) (i) Write down the name of the student leaving the class.

.....  
 Answer ..... (1 mark)

6 (b) (ii) Write down the name of the student who joined the class.

.....  
 Answer ..... (1 mark)



7 The cost of hiring a bicycle is given by the formula

$$\text{Cost in pounds} = \text{Number of days} \times 6 + 12$$

7 (a) Work out the cost in pounds of hiring a bicycle for three days.

.....  
.....

Answer £ ..... (2 marks)

7 (b) Ruby hires a bicycle.  
The cost is £96.

For how many days does she hire the bicycle?

.....  
.....  
.....

Answer ..... days (2 marks)



**8** A shop sells birthday cards.  
Each card has a code that shows the price.

Code	Price of Birthday card (in pounds)
A	1.35
B	1.65
C	1.90
D	2.45

**8 (a)** Karen buys two cards.  
One card has code A and the other card code C.

How much does Karen pay altogether?

.....

Answer £ ..... (1 mark)

**8 (b)** Suki buys two cards.  
Both have the code B.  
She pays with a £5 note.

How much change does she receive?

.....

.....

Answer £ ..... (2 marks)

**8 (c)** Jo buys two cards.  
Altogether she pays £3.80

What cards does she buy?  
There are **two** possible answers.

.....

.....

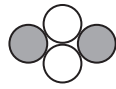
First answer ..... and .....

Second answer ..... and .....

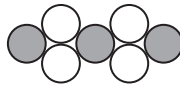
(2 marks)



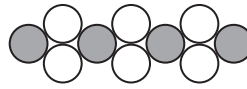
9 These patterns are made using circles.



Pattern 1



Pattern 2



Pattern 3

9 (a) Draw pattern 4

(1 mark)

9 (b) Fill in the missing entries in the table.

<b>Pattern number</b>	1	2	3	4	5
<b>Number of shaded circles</b>	2	3	4		
<b>Number of unshaded circles</b>	2	4	6		
<b>Total number of circles</b>	4	7	10		

(2 marks)

9 (c) It is **not** possible to make one of the patterns with a total of 29 circles.

Give a reason why.

.....

.....

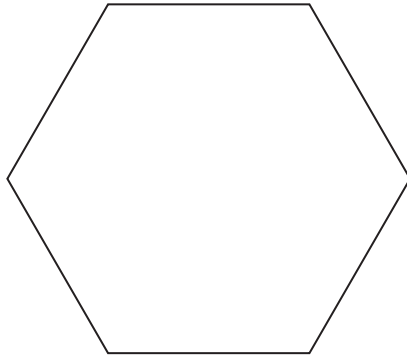
.....

(1 mark)





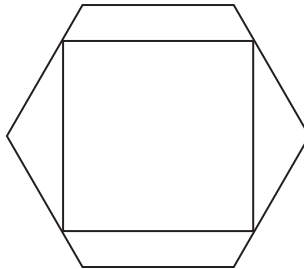
- 10 (a)** This shape is a regular hexagon.



Draw all the lines of symmetry on this regular hexagon.

(2 marks)

- 10 (b)** A square is drawn inside a regular hexagon.  
The centre of the square is the centre of the hexagon.



Draw all the lines of symmetry on this shape.

(1 mark)

**Turn over for the next question**



**11** These are the midday temperatures for four cities on 18<sup>th</sup> December 2010.

City	Temperature (°C)
London	3
Moscow	-15
Wellington	14
New York	-4

**11 (a)** Which city has the highest midday temperature?

.....

Answer ..... (1 mark)

**11 (b)** What is the difference in temperature between London and Moscow?

.....

Answer ..... °C (1 mark)

**11 (c)** The temperature at the North Pole at the same time is 20° C colder than the temperature at Moscow.

What is the temperature at the North Pole?

.....

Answer ..... °C (1 mark)



**12 (a)** Put these decimals in order of size starting with the smallest.

0.3    0.217    0.09    0.11

.....  
.....

Answer ..... (2 marks)

**12 (b)** Two positive numbers multiply together to give 54.  
The difference between the two numbers is 3.

What are the two numbers?

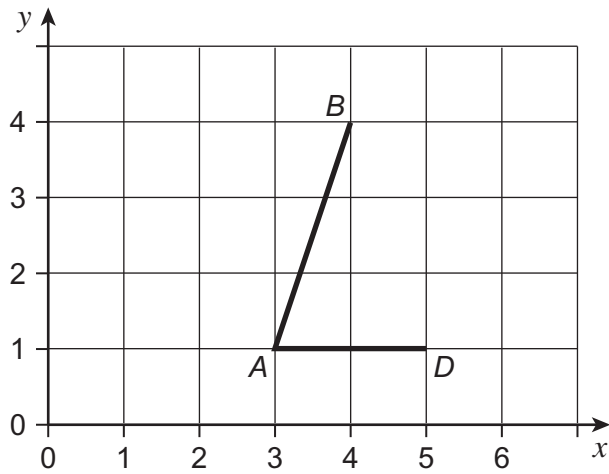
.....  
.....

Answer ..... and ..... (2 marks)

**Turn over for the next question**



13 (a)  $AB$  and  $AD$  are straight lines.



13 (a) (i) Write down the coordinates of  $A$ .

Answer ( ..... , ..... ) (1 mark)

13 (a) (ii)  $ABCD$  is a parallelogram.

Complete the diagram. (1 mark)

