

Ma

KEY STAGE

2

LEVELS

3–5

# Mathematics test

## Test A

Calculator not allowed

First name \_\_\_\_\_

Last name \_\_\_\_\_

School \_\_\_\_\_



For marker's use only

| Page         | Marks |
|--------------|-------|
| 5            |       |
| 7            |       |
| 9            |       |
| 11           |       |
| 13           |       |
| 15           |       |
| 17           |       |
| 19           |       |
| 21           |       |
| 23           |       |
| <b>TOTAL</b> |       |

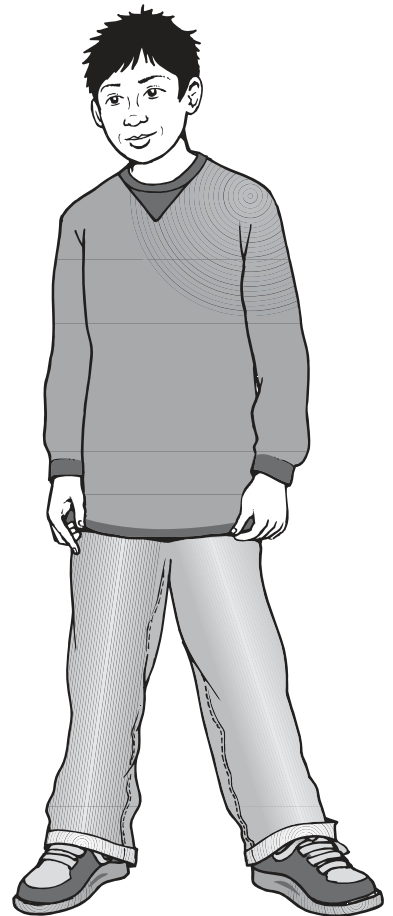
2007



Jamie



Kate



Hassan

# Instructions

You **may not** use a calculator to answer any questions in this test.

Work as quickly and as carefully as you can.

You have **45 minutes** for this test.

If you cannot do one of the questions, **go on to the next one**.

You can come back to it later, if you have time.

If you finish before the end, **go back and check your work**.

**Follow the instructions for each question carefully.**



This shows where you need to put the answer.

If you need to do working out, you can use any space on a page.

**Some questions have an answer box like this:**



Show  
your **working**.  
You may get  
a mark.

A diagram illustrating an answer box. It consists of a large outer rectangle. Inside this rectangle, on the left side, is a smaller oval containing the text 'Show your working. You may get a mark.' with a large arrow pointing to the right. The rest of the large rectangle is empty space for working out. In the bottom right corner of the large rectangle, there is a smaller, empty rectangular box for the final answer.

For these questions you may get a mark for showing your working.

1

Write in the missing numbers.



$$+ 75 = 90$$

1a

1 mark

$$4 \times$$

$$= 200$$

1b

1 mark

2

Circle **one** number in **each** box to make a total of 1000



|     |
|-----|
| 150 |
| 250 |
| 350 |
| 450 |

|     |
|-----|
| 200 |
| 400 |

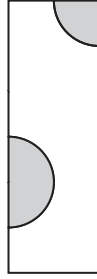
|     |
|-----|
| 150 |
| 250 |
| 350 |
| 450 |

2

1 mark

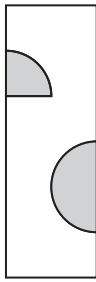
3

Here is a tile.



The tile is turned.

**One** of the diagrams below shows the tile after it has been turned.  
Tick (✓) the correct diagram.



3  
1 mark

4

Kate has a piece of ribbon **one metre** long.

She cuts off 30 centimetres.



How many centimetres of ribbon are left?



|    |
|----|
| cm |
|----|

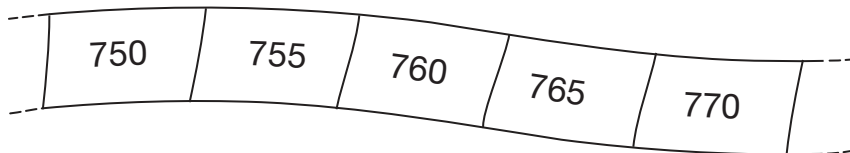
4

1 mark

5

Here is part of a number sequence.

The numbers increase by the same amount each time.



The sequence continues.

Circle **all** of the numbers below that would appear in the sequence.



840

905

989

1000

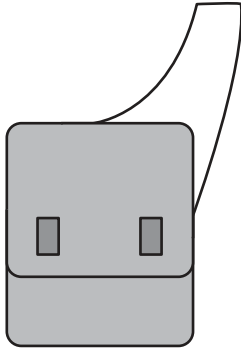
2051

5

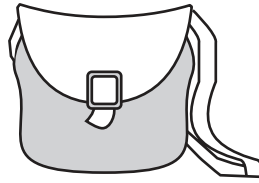
1 mark

6

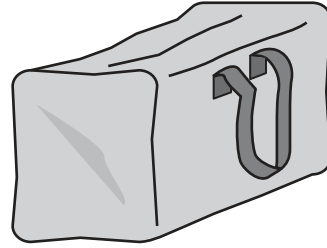
Here are three bags in a shop.



A  
£11.50



B  
£14.65



C  
£16.50

How much does bag B cost to the nearest pound?



6a

1 mark

Jamie buys bag A and bag C.

How much change does he get from £40?



Show your **working**.  
You may get a mark.

6bi

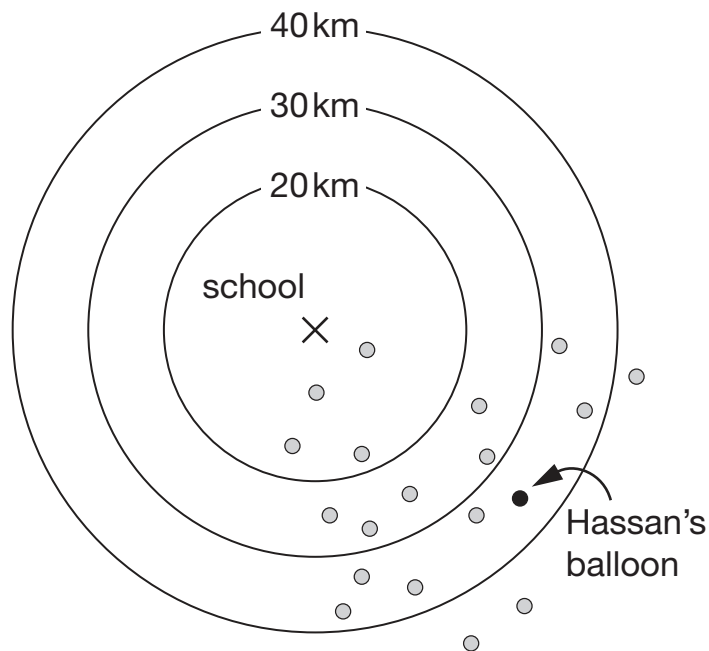
6bii

2 marks

7

Class 6 launched some balloons at a school fete.

This diagram shows how far some of the balloons travelled.



How many balloons on the diagram travelled between 20 km and 30 km?



7a

1 mark

Estimate how far Hassan's balloon travelled.



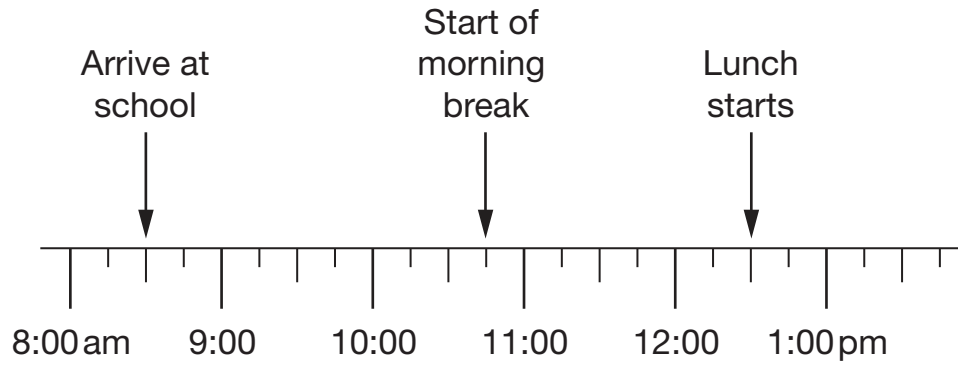
7b

1 mark



8

Jamie makes a time line of part of his day.



What time does Jamie's morning break start?

  am

8a

1 mark

Lunch lasts for three-quarters of an hour.

What time does lunch **finish**?

  pm

8b

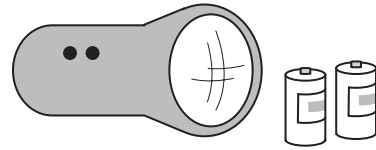
1 mark

9

A torch costs £7.65

Kate buys a torch and **two** batteries.

She pays £8.75 altogether.



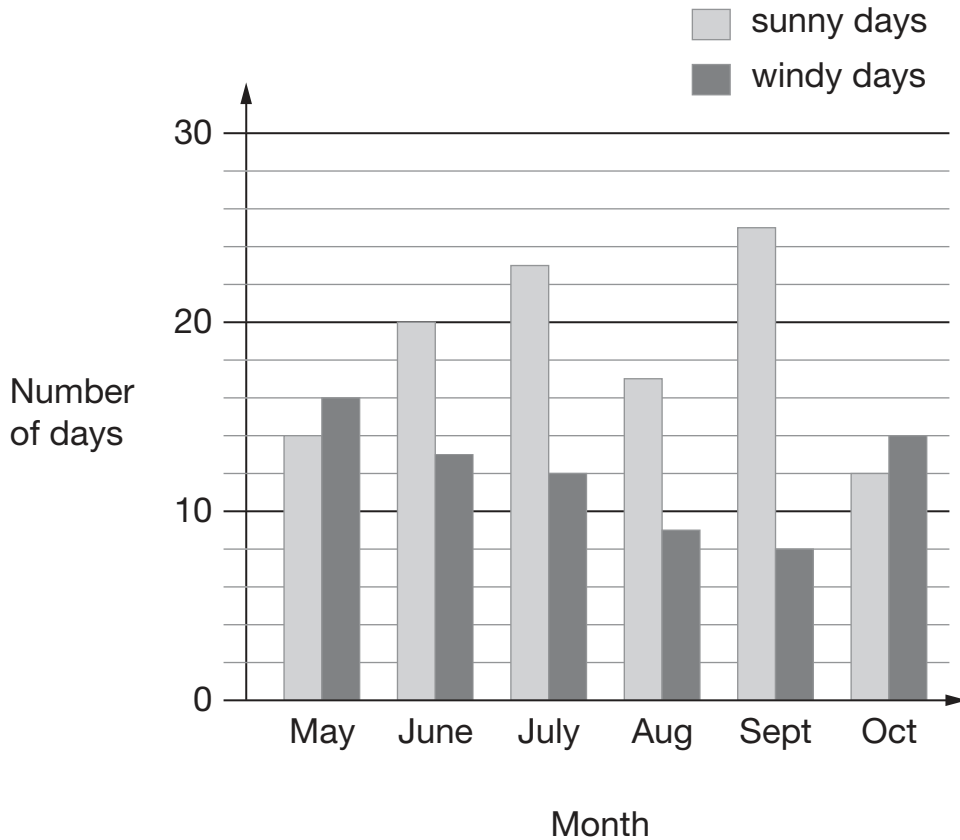
How much does **one** battery cost?

 Show your **working**. You may get a mark. 

9i  
\_\_\_\_\_  
9ii  
\_\_\_\_\_  
2 marks

10

The chart shows the number of sunny days and the number of windy days in six months.



Which months had more windy days than sunny days?



\_\_\_\_\_

10a

1 mark

How many months had more than 15 sunny days?



10b

1 mark

How many more sunny days than windy days were there in **June**?



10c

1 mark

11

Calculate  $17 \times 5 \times 4$



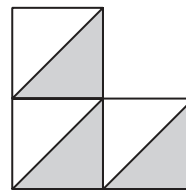
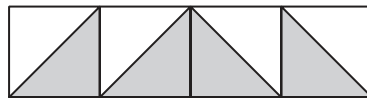
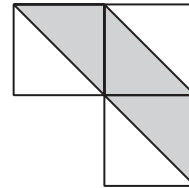
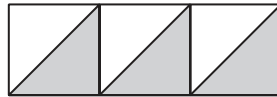
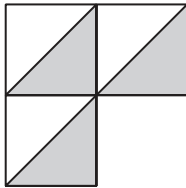
11

1 mark

12

Here are five patterns.

For each pattern put a tick (✓) if it has a line of symmetry.  
Put a cross (✗) if it does not.



12i

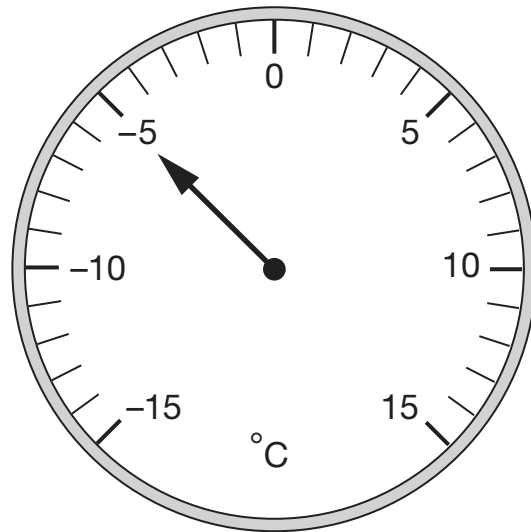
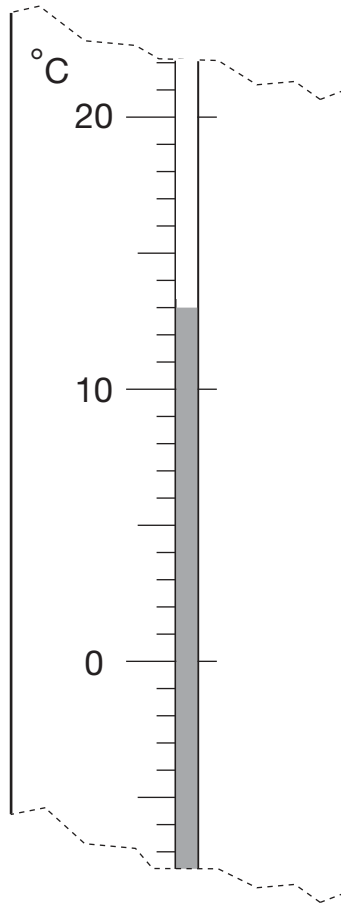
12ii

2 marks

13

Here are two thermometers.

They show two different temperatures.



What is the **difference** between the two temperatures?



degrees

13

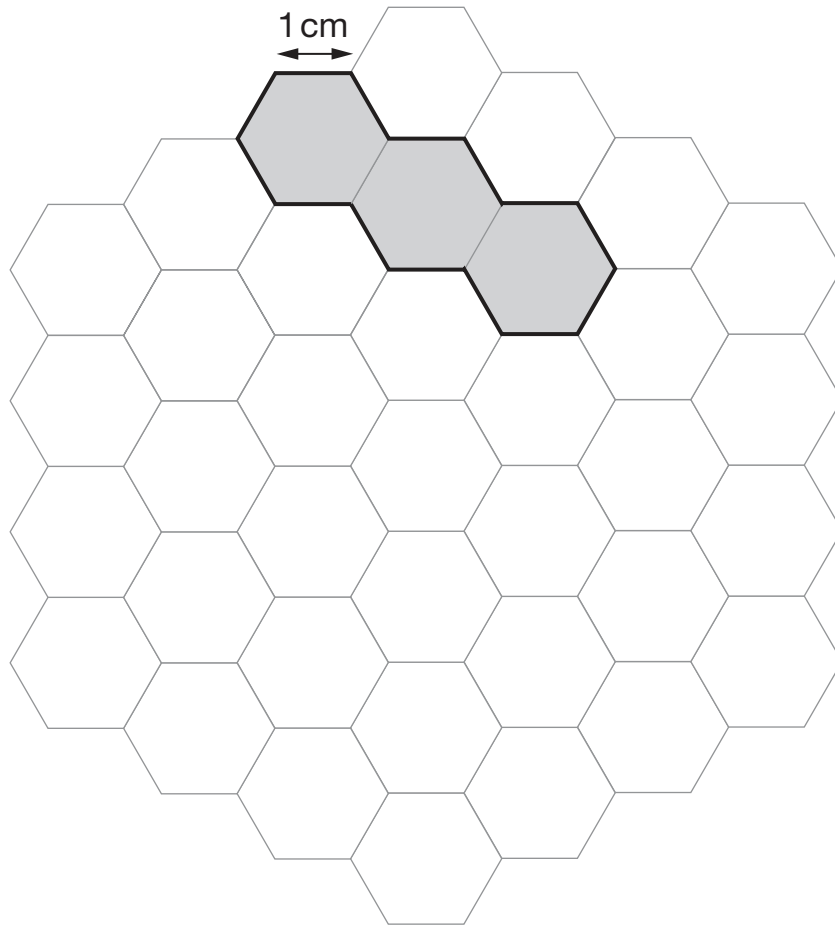
1 mark

14

Here is a grid of regular hexagons.

The shaded shape has an area of 3 hexagons and a perimeter of 14 cm.

Draw another shape on the grid which has an **area** of 4 hexagons and a **perimeter** of 14 cm.



14

1 mark

15

Write **one** number which fits **all three** of these statements.

It is a multiple of 4

It is a multiple of 6

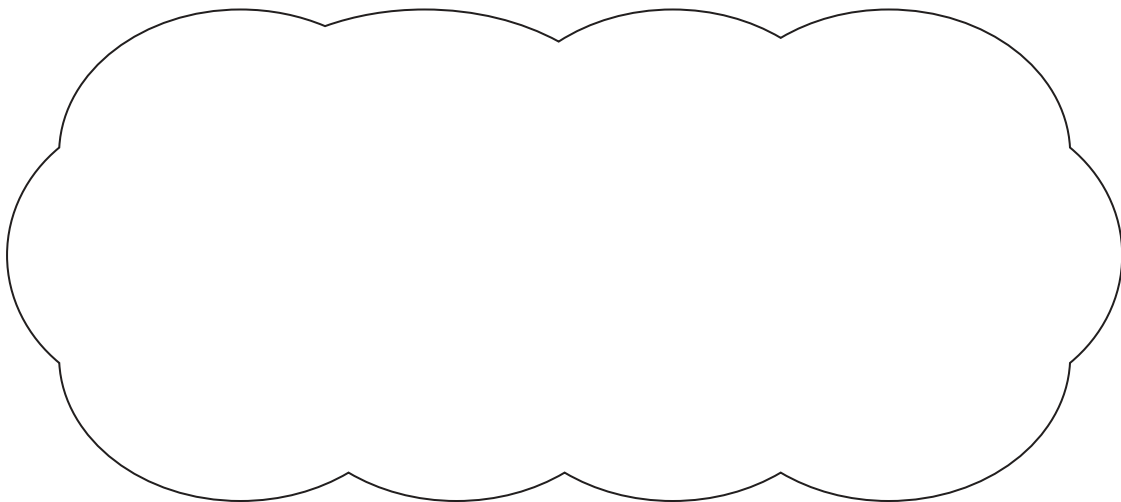
It ends in '8'



15a

1 mark

Explain why a number which ends in '3' **cannot** be a multiple of 4



15b

1 mark

16

Circle **all** the numbers that are **greater than** 0.6



0.5

0.8

0.23

0.09

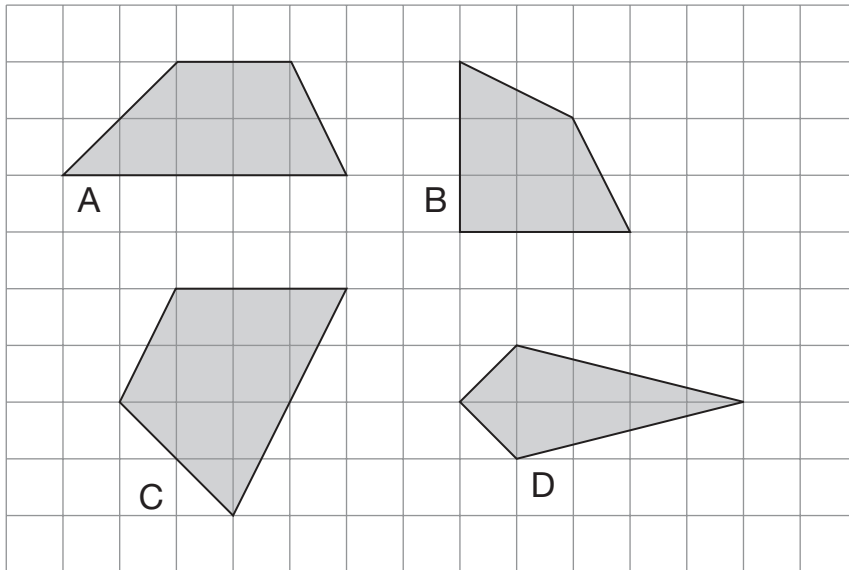
0.67

16

1 mark

17

Here are some shapes on a grid.



Write the letter of each shape that has one pair of parallel sides.



\_\_\_\_\_

17

1 mark





Hassan bought **a notebook** and **a pen**.

He paid **£1.10**

Kate bought **a notebook** and **2 pens**.

She paid **£1.45**

Calculate the cost of **a notebook**.

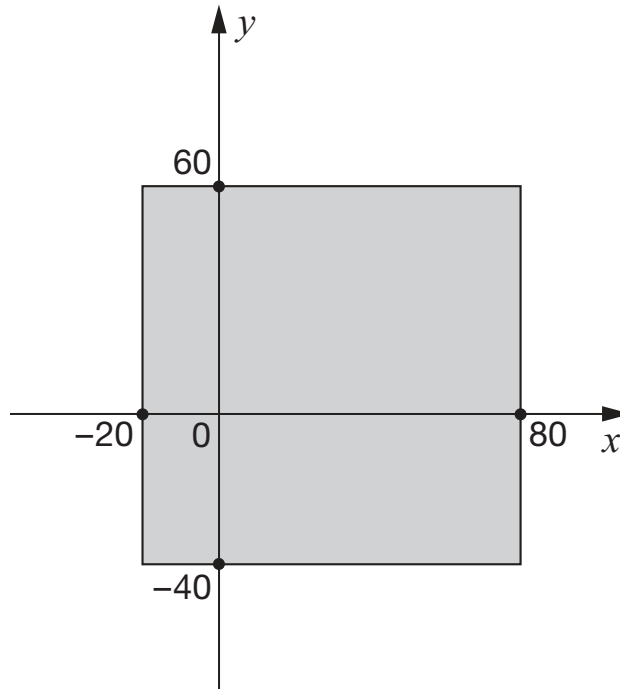
Show  
your **working**.  
You may get  
a mark.

18i


18ii

2 marks

Here is a shaded square on  $x$  and  $y$  axes.



For each of these points, put a tick (✓) to show if it is inside the square or outside the square.

|  | inside<br>the square     | outside<br>the square    |
|--|--------------------------|--------------------------|
|  (50, 70) | <input type="checkbox"/> | <input type="checkbox"/> |
| (60, -30)  | <input type="checkbox"/> | <input type="checkbox"/> |
| (-10, 50)  | <input type="checkbox"/> | <input type="checkbox"/> |
| (-30, -30)   | <input type="checkbox"/> | <input type="checkbox"/> |

19i

19ii

2 marks

20

Calculate  $504 \div 21$



Show your **working**.  
You may get a mark.

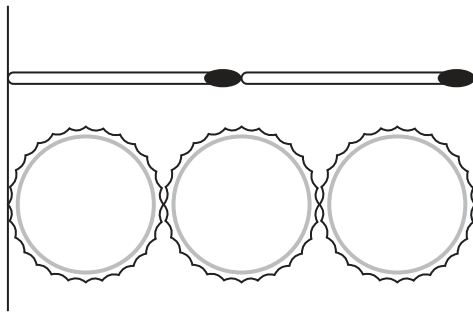
20i

20ii

2 marks

21

Two matchsticks have the same length as three bottle tops.



How many bottle tops will have the same length as 50 matchsticks?



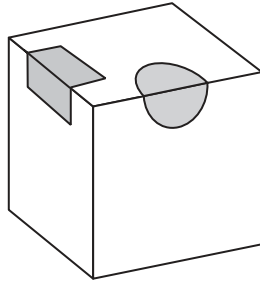
Show your **working**.  
You may get a mark.

21i

21ii

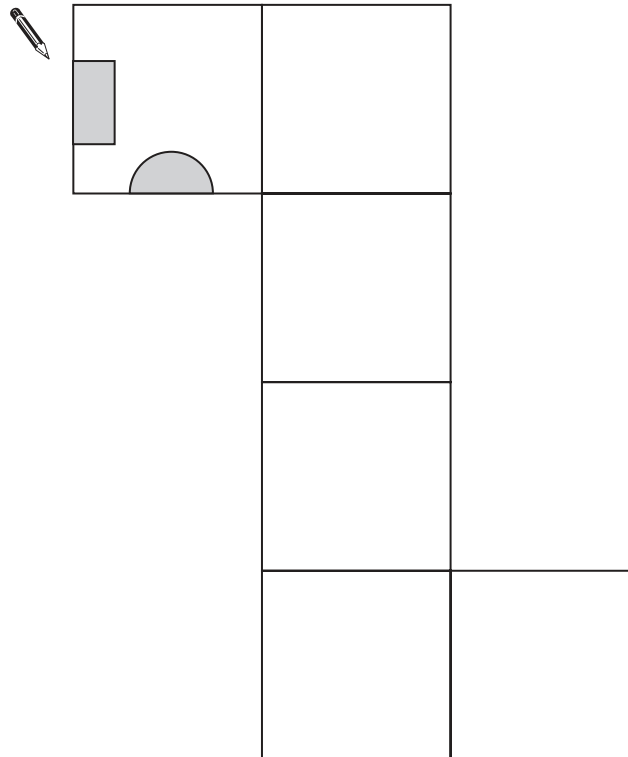
2 marks

A cube has shaded shapes on three of its faces.

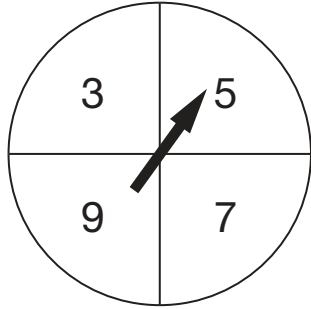


Here is a net of the cube.

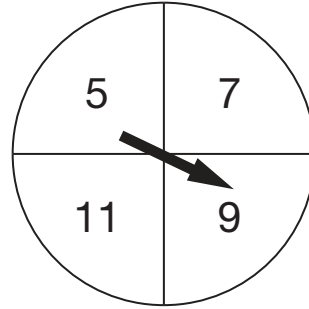
Draw in the two missing shaded shapes.



Here are two spinners, A and B.



A




B

Hassan spins the pointer on each spinner.

He adds his two scores together.

For each statement put a tick (✓) to show if it is **certain**, **possible** or **impossible**.

One has been done for you.

|  | certain                  | possible                            | impossible               |
|--|--------------------------|-------------------------------------|--------------------------|
|  The total will be more than 15 | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| The total will be an even number.  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| The total will be less than 6  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| The score on A will be less than the score on B.   | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |

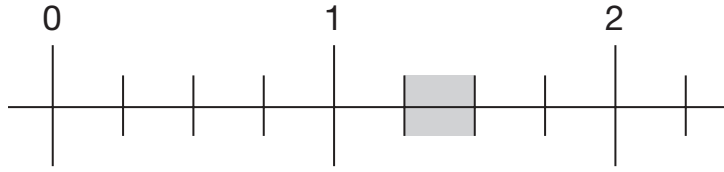
23i

23ii

2 marks

24

Part of this number line is shaded.



Circle **all** the numbers below that belong in the shaded part of the number line.



1.1

1.4

 $1\frac{1}{3}$  $1\frac{1}{5}$ 

24

1 mark

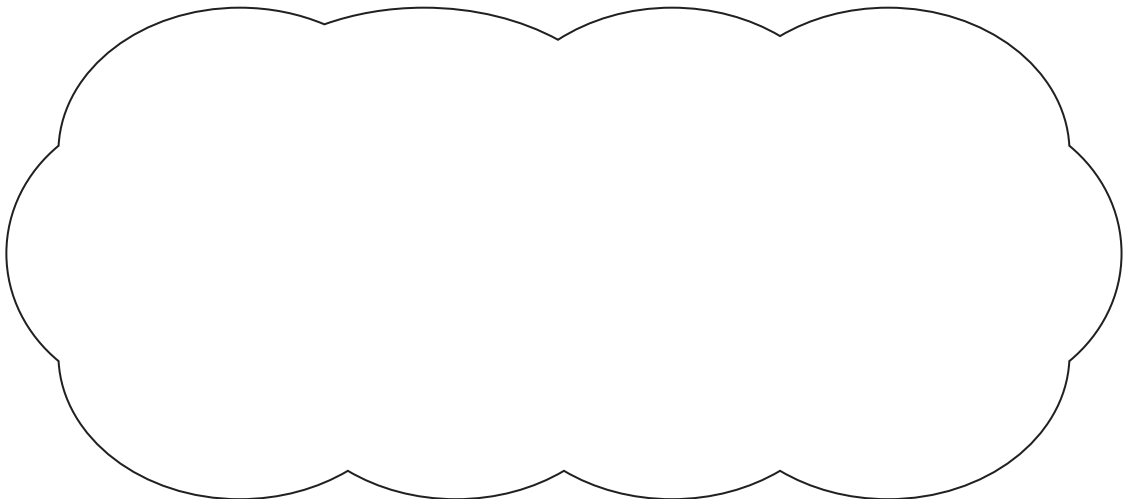
25

Jamie draws a triangle.

He says,

***'Two of the three angles in my triangle are obtuse'.***

Explain why Jamie **cannot** be correct.



25

1 mark

End of test

