

Ma

KEY STAGE

2

LEVELS

3–5

# Mathematics

## Paper 2

Calculator **not** allowed

First name						
Middle name						
Last name						
Date of birth	Day		Month		Year	
School name						
DfE number						

2015



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# Instructions

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

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 white space on a page.

Do not write over any barcode.

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



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



D 0 0 0 7 0 A 0 3 2 4

1

Write in the missing number.



$$1 + 10 + \boxed{\phantom{00}} = 100$$

1

1 mark

2

Put these temperatures in order, starting with the **lowest**.

21°C

-13°C

-24°C

0°C

35°C

 °C °C °C °C °C

lowest

2

1 mark



3

These are some prices in a fish and chip shop.

Fish	£2.30	Peas	35p
Sausage	£1.80	Curry sauce	40p
Chips (small bag)	60p	Bread roll	30p
Chips (large bag)	90p	Pickled onion	28p

Alfie buys one fish, a large bag of chips and a pickled onion.

How much does he pay?



£

3a

1 mark

Megan buys a sausage and a bread roll.

Chen buys a small bag of chips and a curry sauce.

How much **more** does Megan pay than Chen?



Show  
your  
working

£

3bi

3bii

2 marks

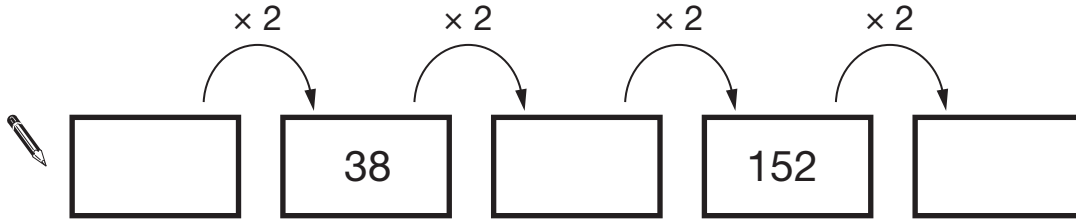


D 0 0 0 7 0 A 0 5 2 4

4

Here is a doubling sequence.

Write the three missing numbers.



4i

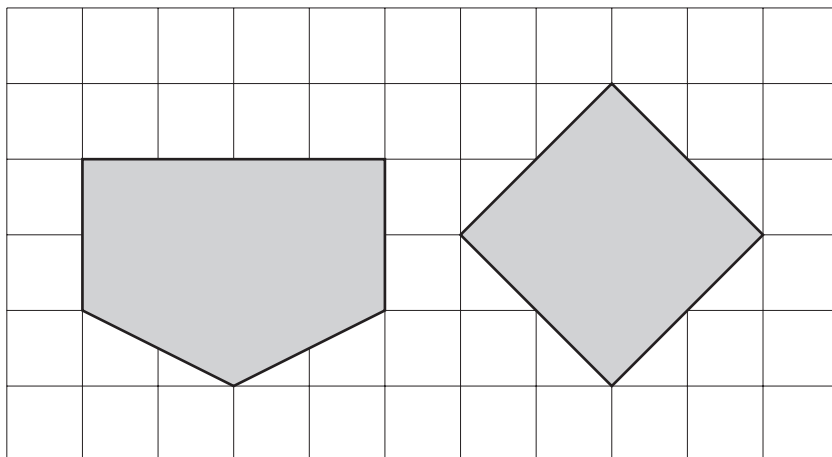
4ii

2 marks

5

Here are two shapes on a square grid.

For each shape, write how many **right angles** it has.



5

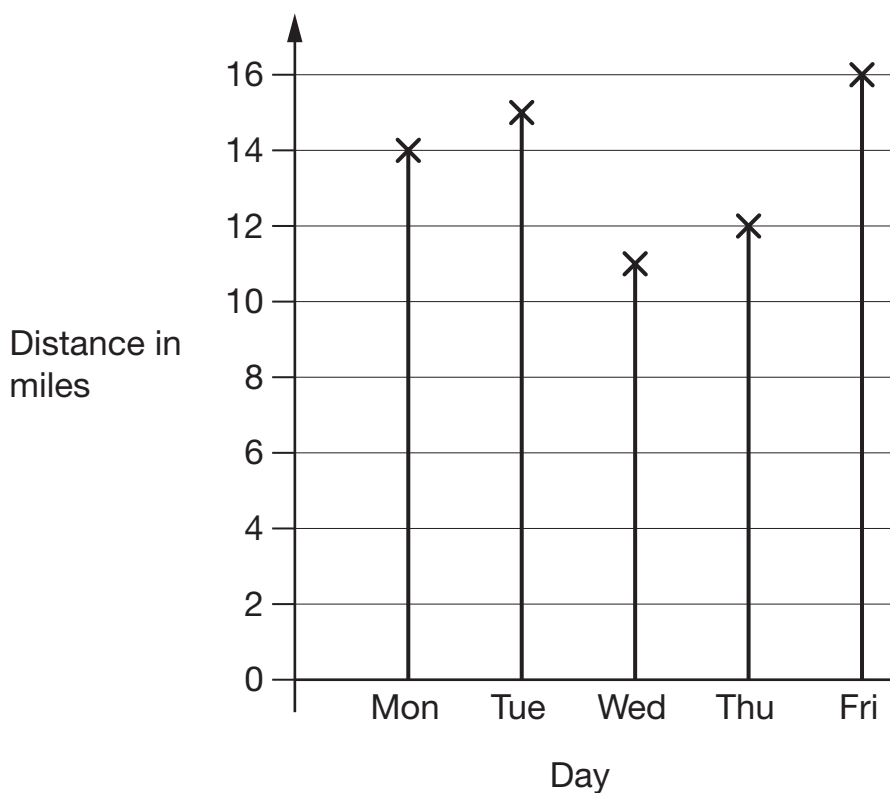
1 mark



6

Amy went on a cycling holiday.

This chart shows how far she cycled each day.



How much **further** did Amy cycle on Friday than on Wednesday?



6a

1 mark

How far did Amy cycle **altogether** on the three days she cycled the most?



6b

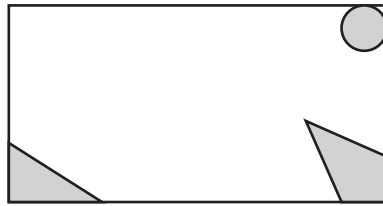
1 mark



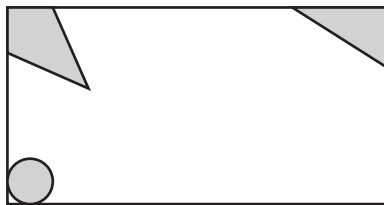
D 0 0 0 7 0 A 0 7 2 4

7

Megan has a rectangular tile with this design on it.



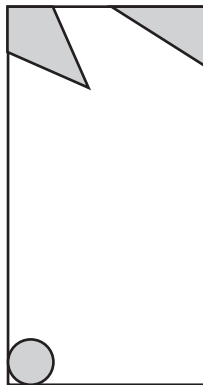
Here are five more rectangular tiles.



A



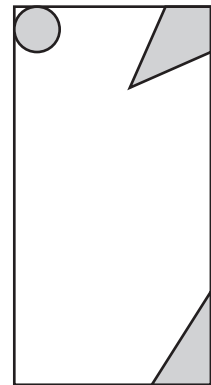
B



C



D



E

Write the letters of **all** the tiles that have the same design as Megan's tile.



\_\_\_\_\_

7i

7ii

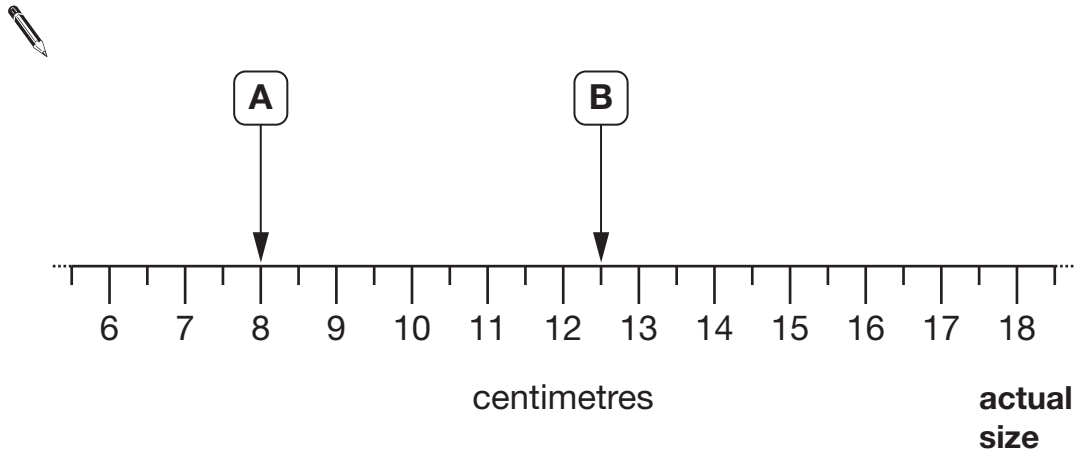
2 marks





8

Here is part of a centimetre scale, with two points marked.



What is the distance between point **A** and point **B**?



8a

1 mark

Point **C** is **twice as far** from point A as it is from point B.

On the scale above, mark one place where point C could be.

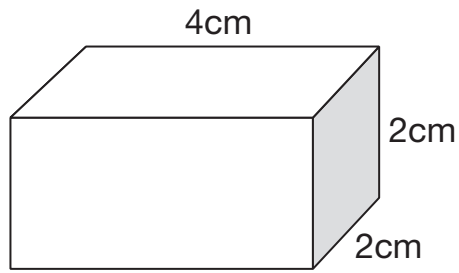
8b

1 mark

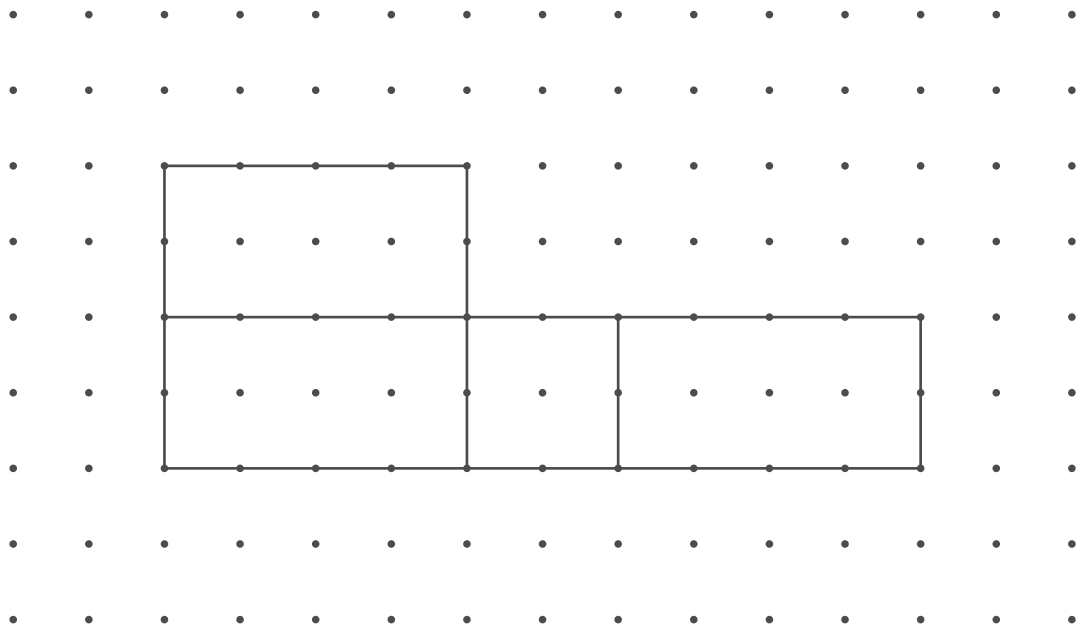


9

Look at the cuboid below.



Draw **two** more faces to complete the net of the cuboid.



9a

1 mark

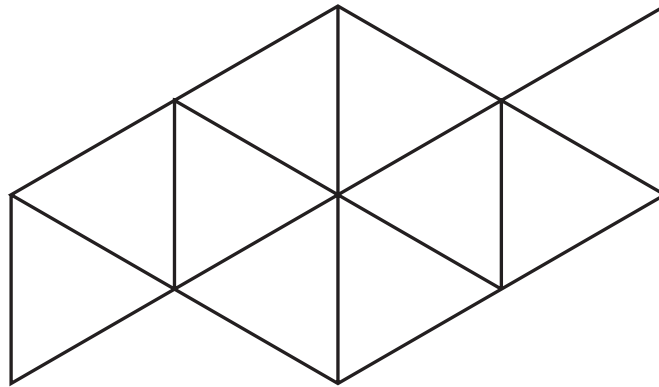
9b

1 mark



10

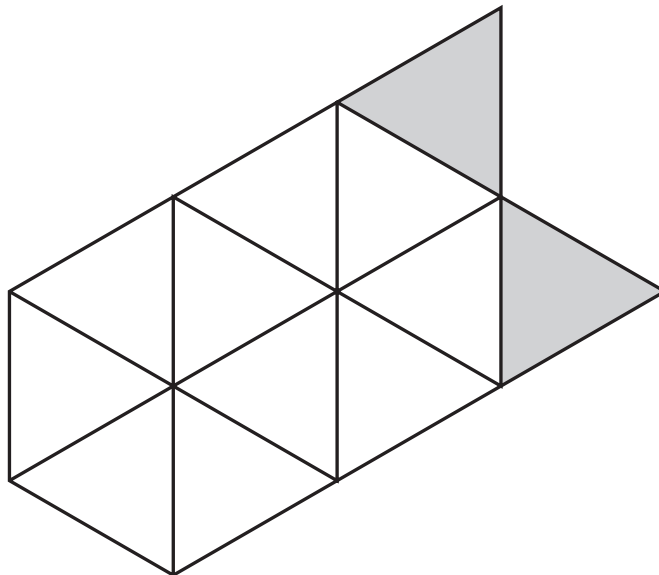
Shade  $\frac{1}{5}$  of this shape.



10a

1 mark

Shade **more** triangles on this shape so that  $\frac{1}{3}$  is shaded.



10b

1 mark

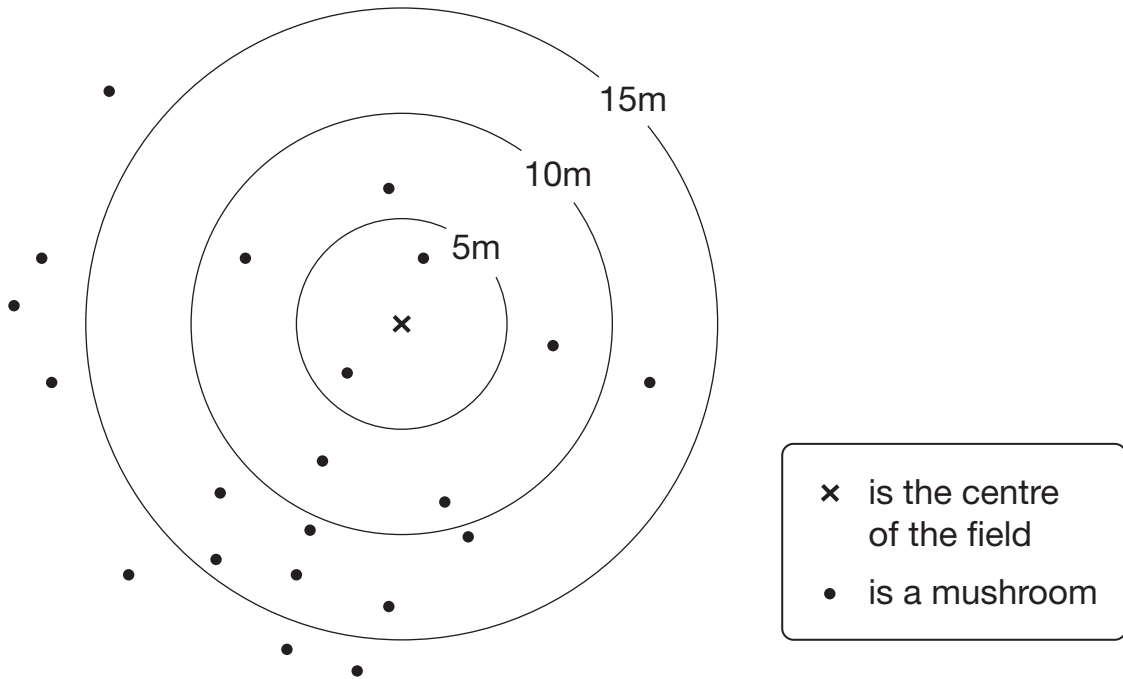


D 0 0 0 7 0 A 0 1 1 2 4

11

Class 6 did a survey of mushrooms growing in a field.

The diagram shows the distances of mushrooms from the centre of the field.



How many mushrooms were more than 10 metres from the centre?



11a

1 mark

What **fraction** of the mushrooms were less than 10 metres from the centre?



11b

1 mark

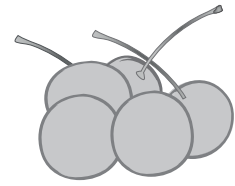


12

Seb had some cherries.

Every day he ate 10 cherries and gave 5 away.

After he gave the last 5 cherries away, he had eaten 40 cherries altogether.



How many cherries did Seb have at the start?



Show  
your  
working

A large rectangular box for showing working. On the right side of the box, there is a smaller, empty rectangular box for the final answer.

12i

12ii

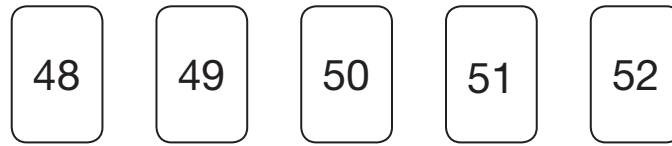
2 marks



D 0 0 0 7 0 A 0 1 3 2 4

13

Here are five number cards.



Use each card **once** to make every statement below correct.



is a multiple of 3

is a multiple of 4

is a multiple of 5

is a multiple of 6

is a multiple of 7

13i

13ii

2 marks



14

Write in the missing number.



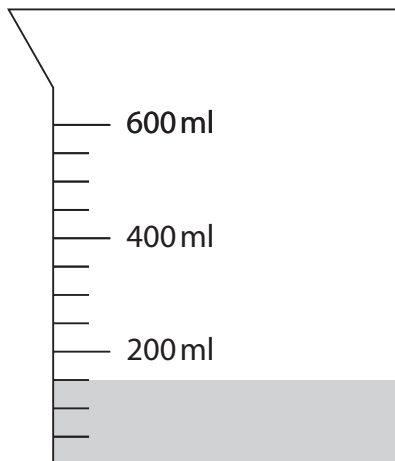
$$8.5 + 14.7 = 10.2 + \boxed{\phantom{00}}$$

14

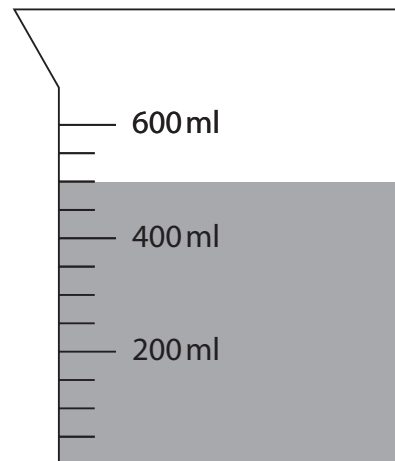
1 mark

15

One jug contains water and the other jug contains oil.



Water



Oil

How much **more** oil is there than water?

15

1 mark



D 0 0 0 7 0 A 0 1 5 2 4

Write the missing number in each calculation.



$$25 \div \boxed{\phantom{00}} = 3 \text{ remainder } 4$$

16a

---

1 mark

$$35 \div \boxed{\phantom{00}} = 4 \text{ remainder } 3$$

16b

---

1 mark



**17**

Here is part of the morning bus timetable from Winton to Yansley.

Winton	9:35	9:55	10:15	10:35
Ingham	9:45	10:05	10:25	10:45
Carston	10:01	10:21	10:41	11:01
Dubley	10:23	10:43	11:03	11:23
Yansley	10:55	11:15	11:35	11:55

How many minutes does the bus take to get from Ingham to Dubley?

**minutes**

17a

1 mark

Megan is in Carston.

She wants to be in Yansley before 11:30

What is the time of the latest bus she can take from Carston?



:

17b

1 mark

One morning, the 10:35 bus from Winton gets to Carston  
3 minutes early.

What time does it get to Carston?



:

17c

1 mark



D 0 0 0 7 0 A 0 1 7 2 4

18

Circle the number that is closest to 20



19.95

20.1

19.09

20.09

20.201

18

1 mark

19

Calculate  $936 \div 36$



Show  
your  
working

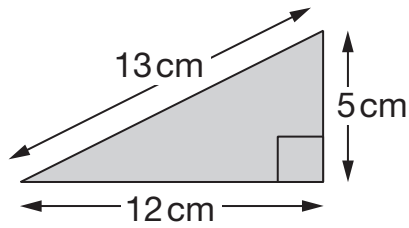
19i

19ii

2 marks

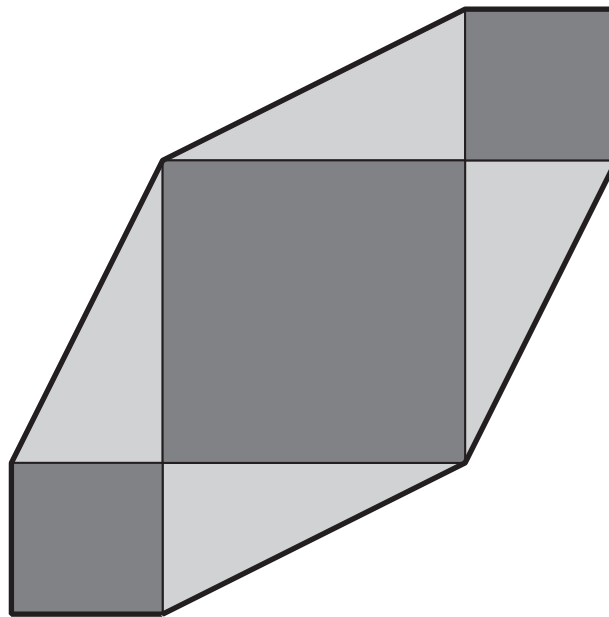


Chen has some right-angled triangular tiles.



Not  
actual  
size

He makes this shape with four of his triangular tiles and three square tiles.



Not  
actual  
size

What is the **perimeter** of Chen's shape?



Show  
your  
working

\_\_\_\_\_ 20i  
\_\_\_\_\_ 20ii  
\_\_\_\_\_ 2 marks

cm



21

The numbers in this sequence increase by equal amounts each time.

Write in the three missing numbers.



21i

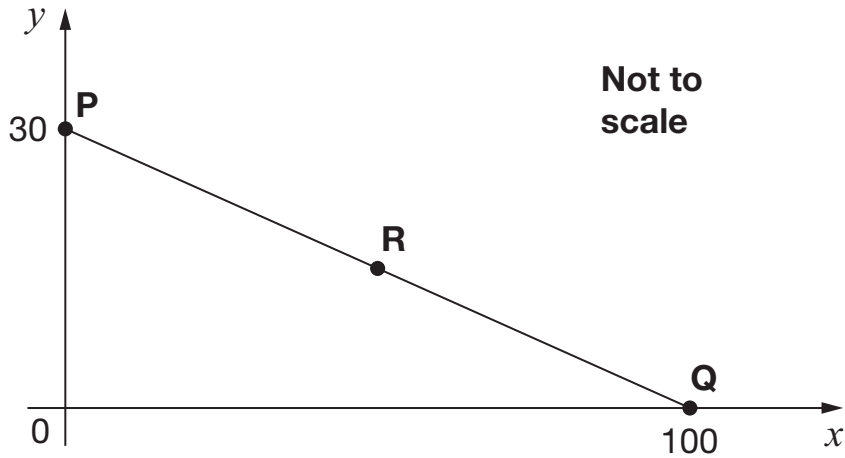
1 mark

21ii

1 mark

22

In this diagram **R** is an equal distance from **P** and **Q**.



What are the coordinates of **R**?



**R** =

22

1 mark

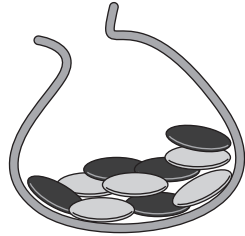


23

Megan and Chen each have a bag of counters.

Megan's bag has 5 blue counters and 5 green counters.

Chen's bag has 10 blue counters, 5 green counters and 5 red counters.



Megan's bag



Chen's bag

They each take a counter from their bag without looking.

Chen says,

***'I am more likely than Megan to take a blue counter.'***

Is Chen correct?  
Circle **Yes** or **No**.

 Yes / No

Explain how you know.



23

1 mark



D 0 0 0 7 0 A 0 2 1 2 4

[END OF TEST]

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