

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.



1

Write in the missing number.



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

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

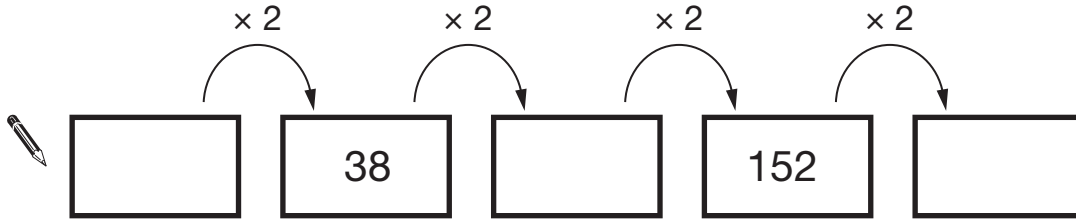


D 0 0 0 7 0 A 0 5 2 4

4

Here is a doubling sequence.

Write the three missing numbers.



4i

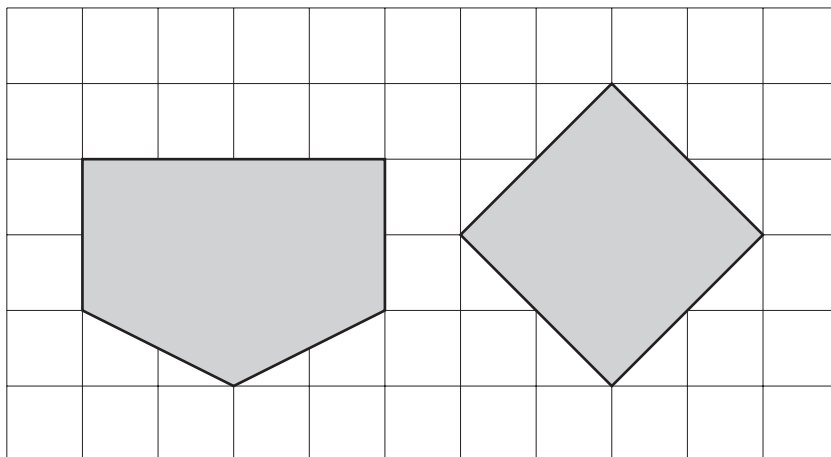
4ii

2 marks

5

Here are two shapes on a square grid.

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



5

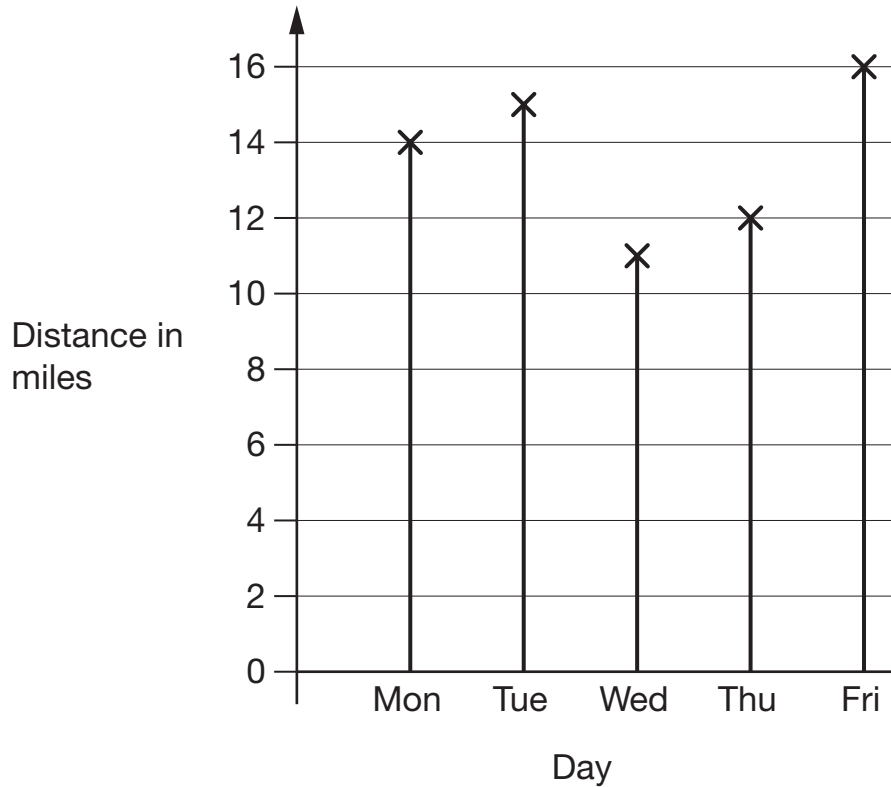
1 mark



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?



miles

6a

1 mark

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



miles

6b

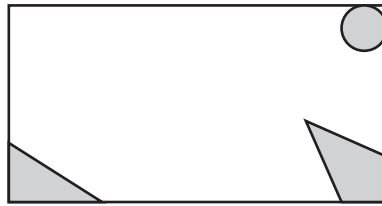
1 mark



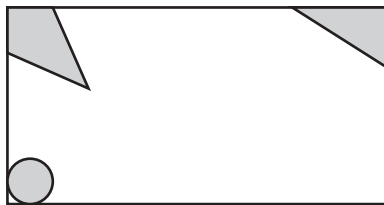
D 0 0 0 7 0 A 0 7 2 4

7

Megan has a rectangular tile with this design on it.



Here are five more rectangular tiles.



A



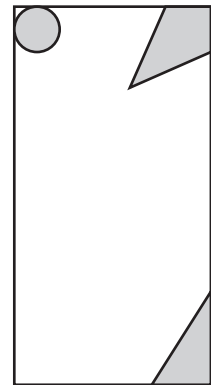
B



C



D



E

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



7i

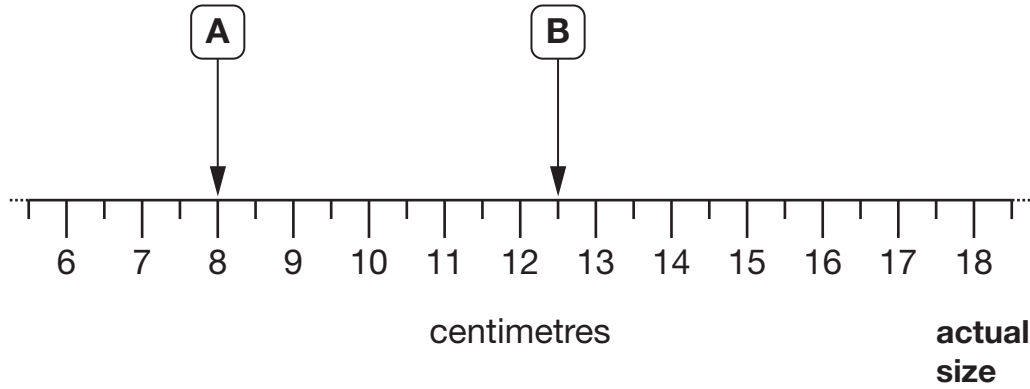
7ii

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.

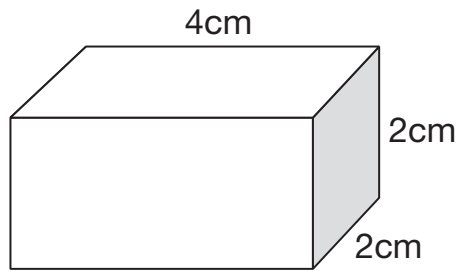
8b

1 mark



9

Look at the cuboid below.



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



A grid of dots for drawing a net. A partial net is already drawn, consisting of three rectangles:

- A top rectangle that is 4 units wide and 2 units high.
- A middle rectangle that is 4 units wide and 2 units high, positioned directly below the top rectangle.
- A right rectangle that is 4 units wide and 2 units high, positioned to the right of the middle rectangle.

The grid is 14 units wide and 10 units high. The partial net is drawn on the grid with solid lines.

9a

1 mark

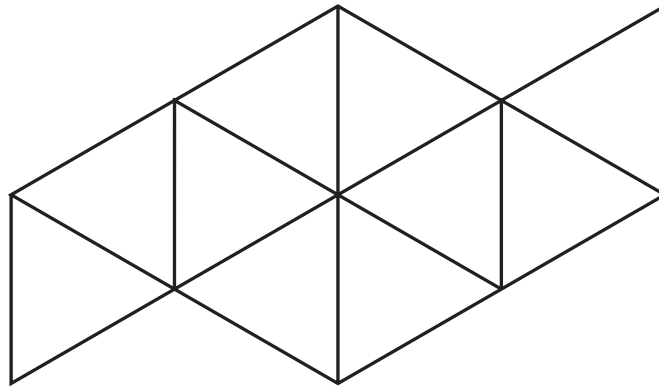
9b

1 mark



10

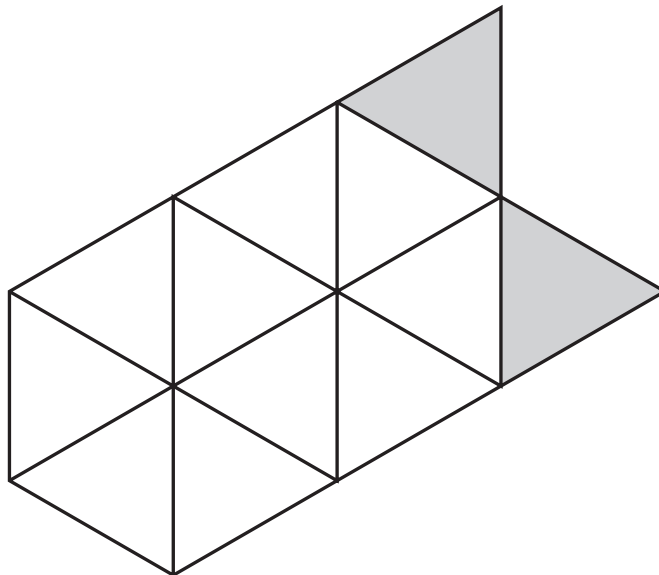
Shade $\frac{1}{5}$ of this shape.



10a

1 mark

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



10b

1 mark

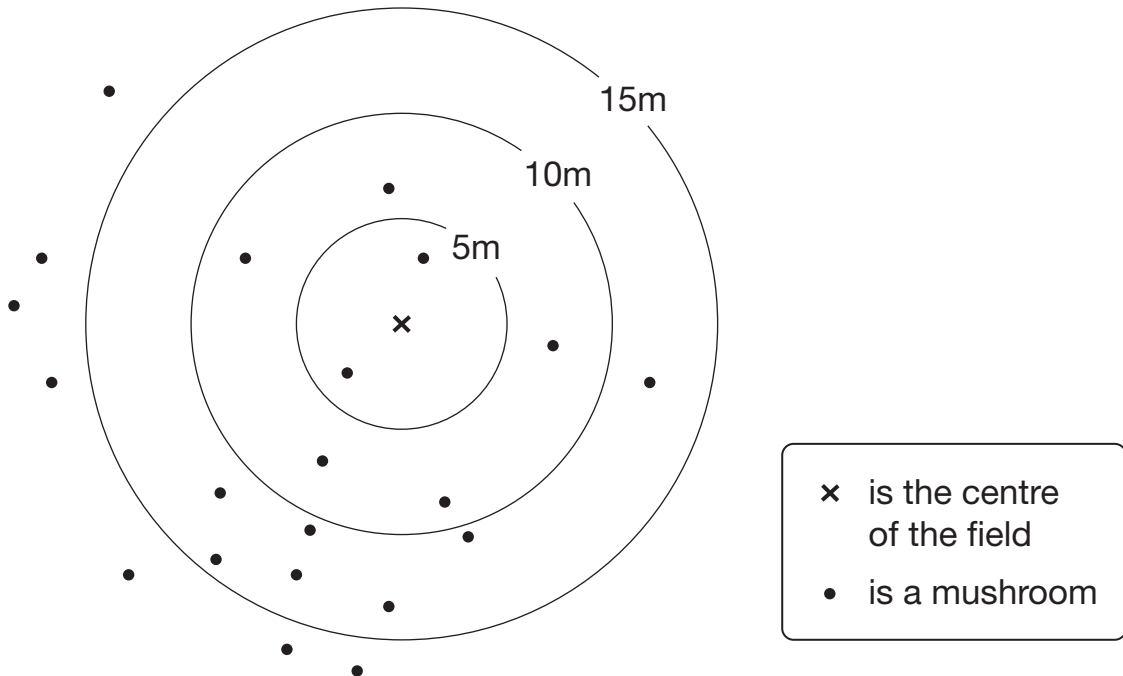


D 0 0 0 7 0 A 0 1 1 2 4

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

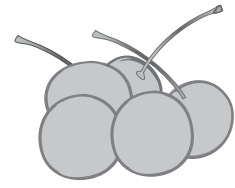


12

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

12i

12ii

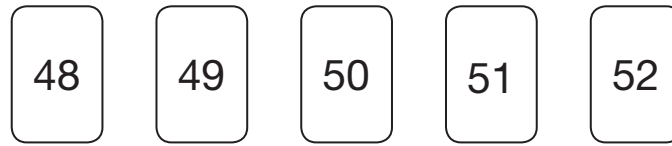
2 marks



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.



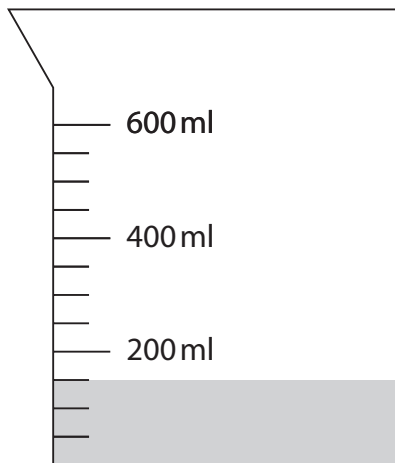
$$8.5 + 14.7 = 10.2 + \boxed{}$$

14

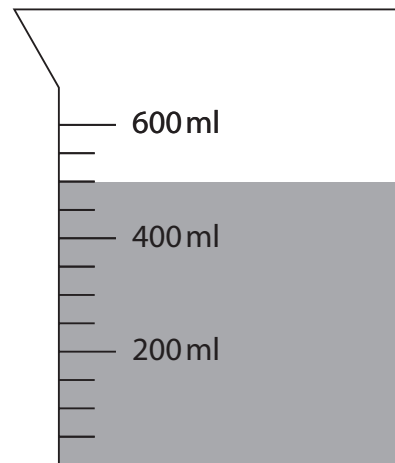
1 mark

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

16

Write the missing number in each calculation.



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

16a

1 mark

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

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?



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

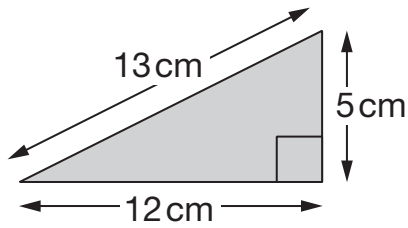
19ii

2 marks



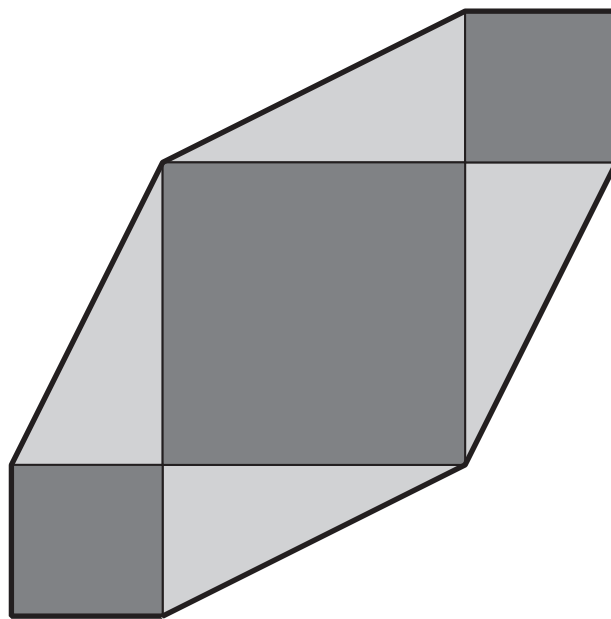
20

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

cm

20i
20ii
2 marks



21

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

Write in the three missing numbers.



1

7

21i

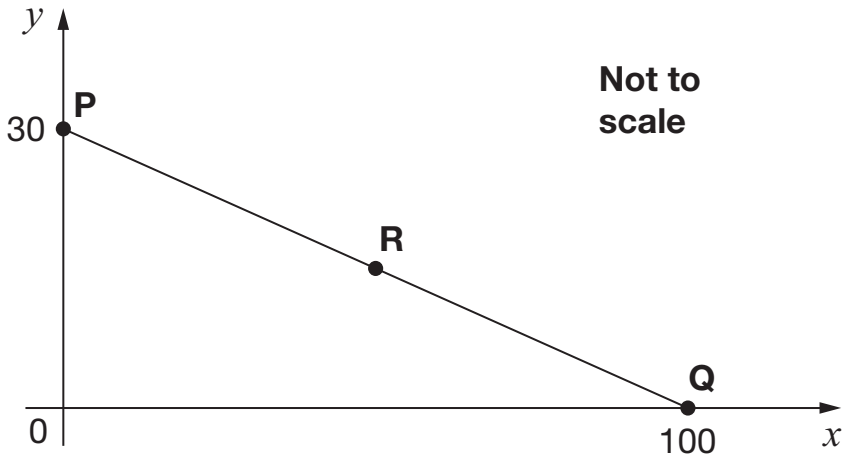
1 mark

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

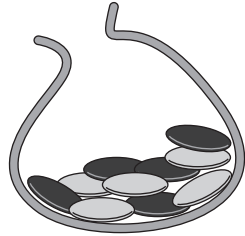


23

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

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Print version product code: STA/15/7214/p ISBN: 978-1-78315-416-6
Electronic PDF version product code: STA/15/7214/e ISBN: 978-1-78315-444-9

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