

Progress check

Year 5

Mathematics

Paper 2: reasoning and problem solving

First name						
Middle name						
Last name						
Date of birth	Day		Month		Year	
Teacher						

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These assessments have been designed by the White Rose Maths Hub.
For more information, please visit www.whiterosemathshub.co.uk

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Instructions

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

Questions and answers

You have **35 minutes** to complete this test.

Follow the instructions for each question.

Work as quickly and as carefully as you can.

For this assessment you will require a ruler.

If you need to do working out, you can use the space around the question.

Some questions have a method box like this:

Show your method

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

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.**

Marks

The number under each line at the side of the page tells you the maximum number of marks for each question.

1

Complete the sequence.

5,300	5,200	5,100		
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1 mark

2

Jeremy has these digit cards.



He uses the cards to make **six** different 4 digit numbers.

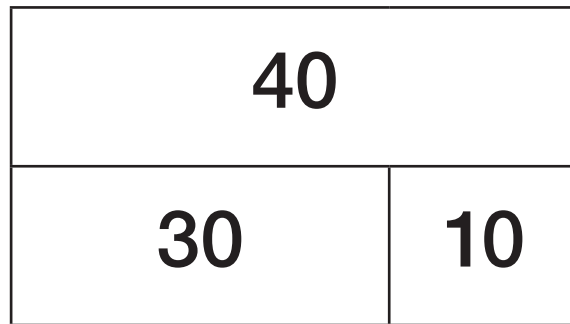
They are all between 4,000 and 5,000

Write his six numbers in ascending order.

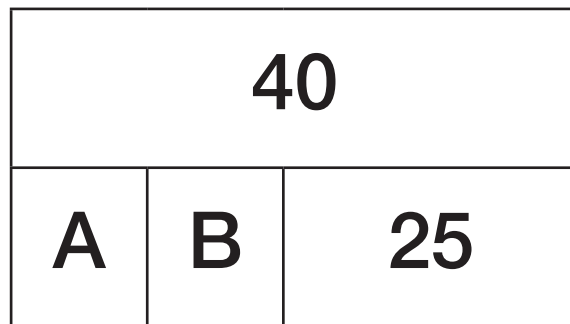
2 marks

3

Here is a bar model.



Here is another bar model.



A and B are equal.

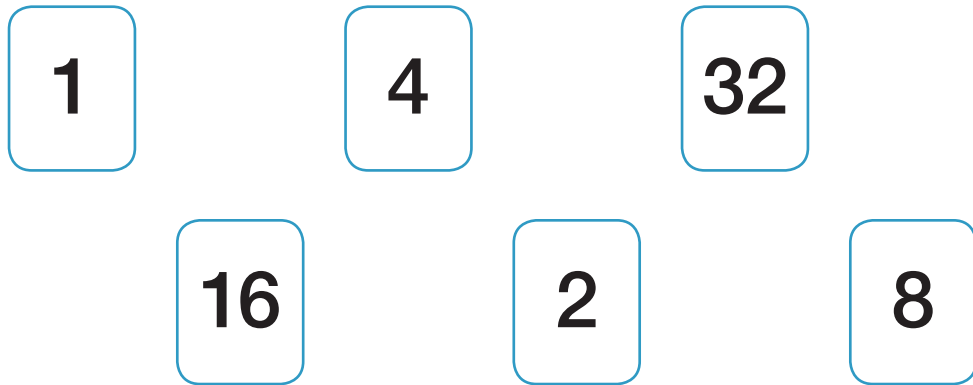
Find the value of A and B.

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2 marks

4

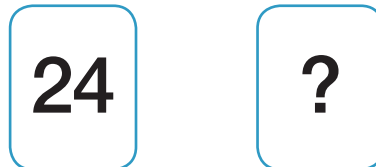
Here are all the factors of a number.



What is the number?

1 mark

Here are two number cards.



Each card has a 2 digit number written on it.

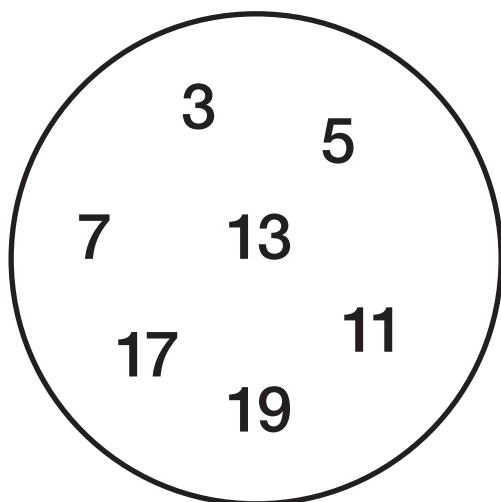
The highest common factor of these two numbers is 6

What could the other number be?

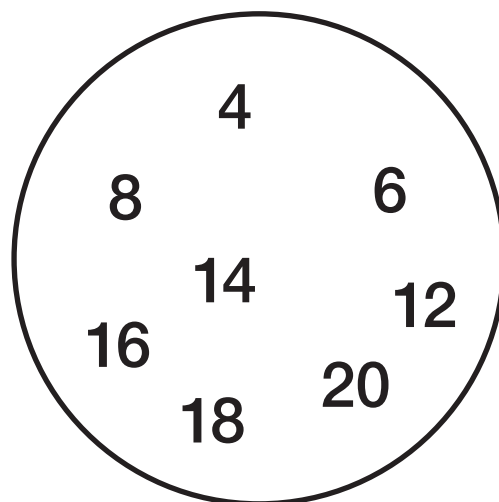
1 mark

5

Tom has sorted the numbers 1-20 into prime and non-prime numbers.



Prime



Non-Prime

He has 4 numbers left to place.

Can you write the missing numbers in the correct circles?

1

2

9

10

2 marks

6

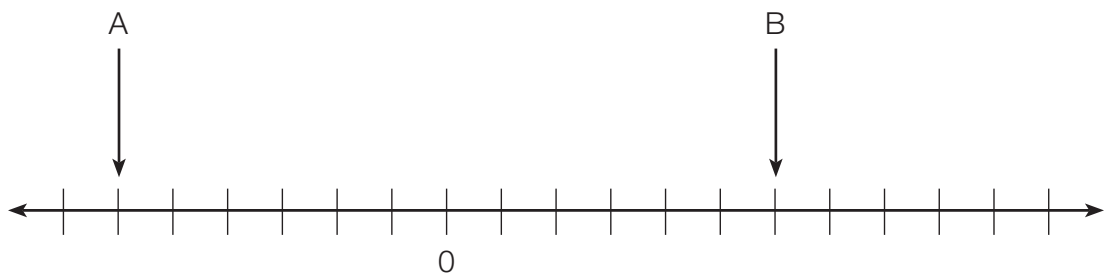
Katie was born in 1995

How old is she in the year MMXIV?

1 mark

7

Two numbers are marked on a number line.



The difference between A and B is 48

What is the value of A?

1 mark

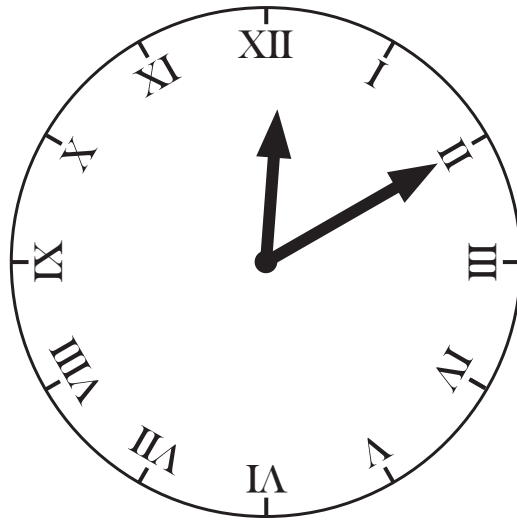
C is 14 more than B.

Mark C on the number line.

1 mark

8

Here is a clock.



The minute hand moves 270° clockwise.

What time is it now?

1 mark

9

Draw a 73 degree angle.

1 mark

10

Here is a train timetable.

Halifax	13:47	13:59	14:14	14:25
Bradford	14:00	14:12	14:27	14:38
Leeds	14:22	14:34	14:49	15:00
Micklefield	14:43	14:55	15:10	15:21
York	15:07	15:19	15:34	15:45

Hassan needs to be in Leeds by 14:45

What time does he need to get the train from Halifax?

1 mark

Jemima gets the 14:14 train from Halifax.

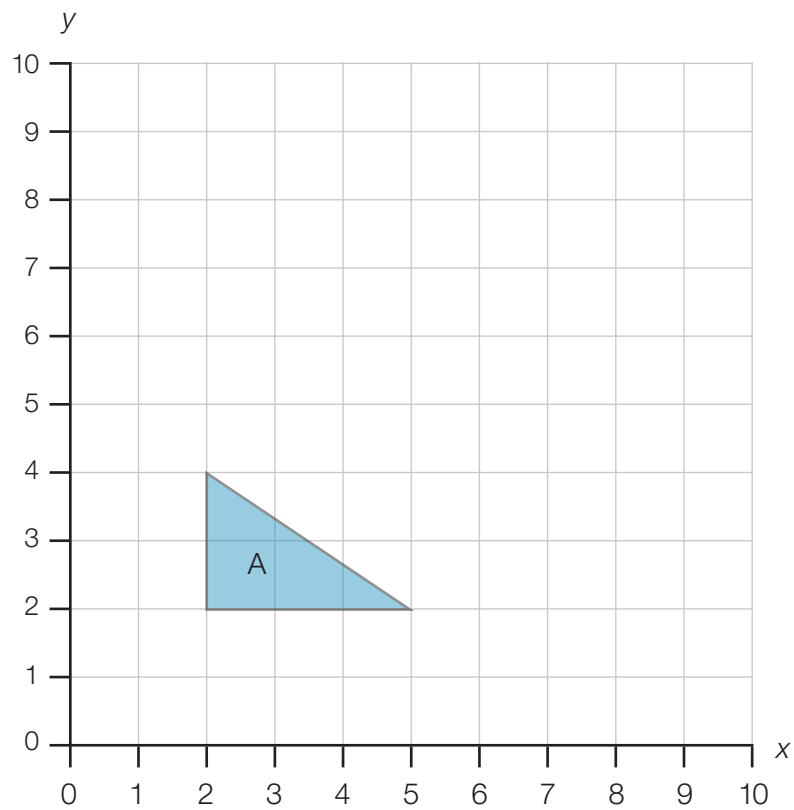
How long is her journey to Micklefield?

 minutes

1 mark

11

Here is a grid.



Triangle A is translated two squares right and five squares up.

Draw the new triangle.

1 mark

Write the co-ordinates of the vertices of the new triangle.

(,)

(,)

(,)

1 mark

12

Danyaal receives £165 for his birthday.

He saves $\frac{2}{5}$ of the money and spends the rest.

He spends £35 on a computer game and the rest on clothes.

How much money does he spend on clothes?

Show
your
method

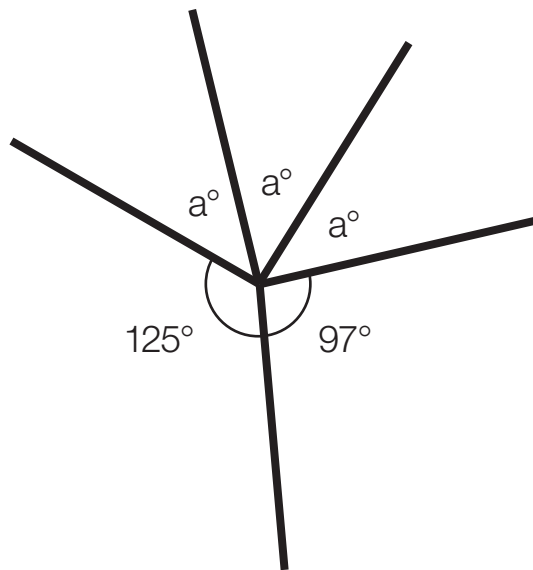
A large grid for showing the method to solve the problem. A small box with the pound symbol (£) is located in the bottom right corner of the grid.

3 marks

13

The three missing angles are equal.

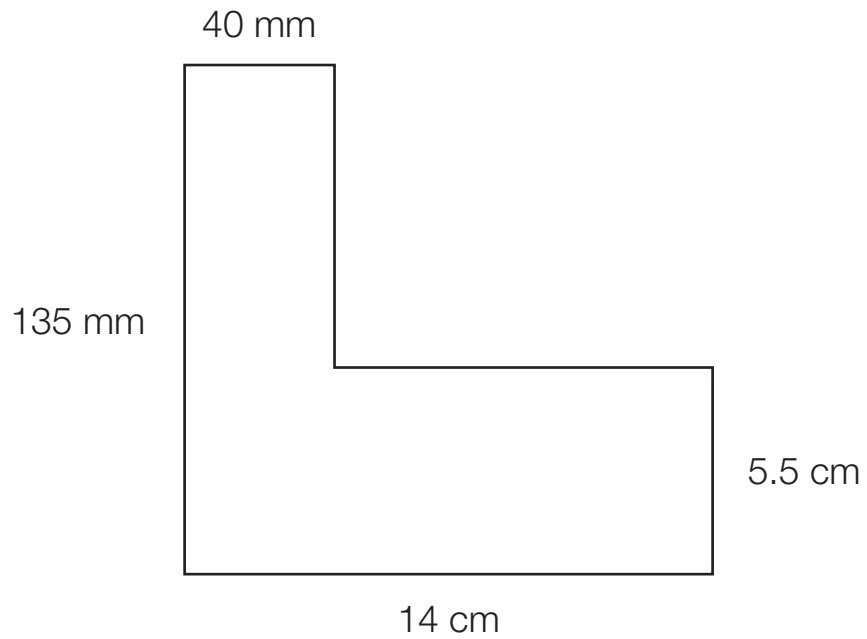
Find the value of a



2 marks

14

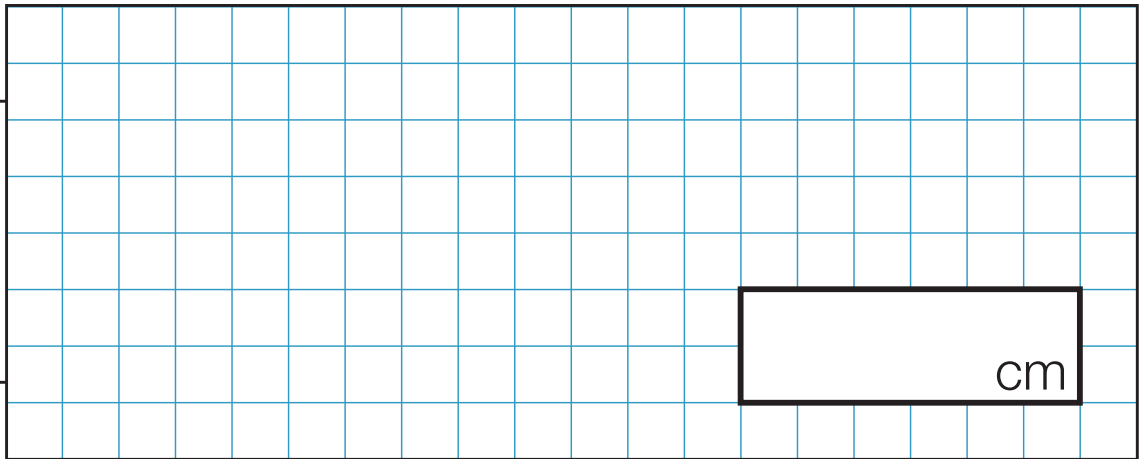
Here is a shape.



Find the perimeter of the shape.

Give your answer in cm.

Show
your
method

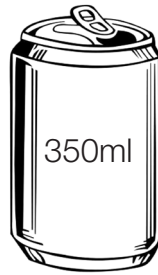


3 marks

15

Jack buys 6 cans of lemonade.

One can costs 52 pence.



He sells the lemonade in glasses and has no lemonade left over.



100ml glass of lemonade
25p

How much profit does he make?

Show
your
method

A large grid for showing the method to calculate profit. The grid is 20 units wide and 20 units high. A small rectangular box is drawn in the bottom right corner of the grid, spanning 4 units wide and 2 units high.

4 marks

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