

Summer Assessment

Year 8

Mathematics

Foundation: No calculator allowed

Time allowed: 45 minutes

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

These assessments have been designed by White Rose Maths.
For more information, please visit www.whiterosemaths.com



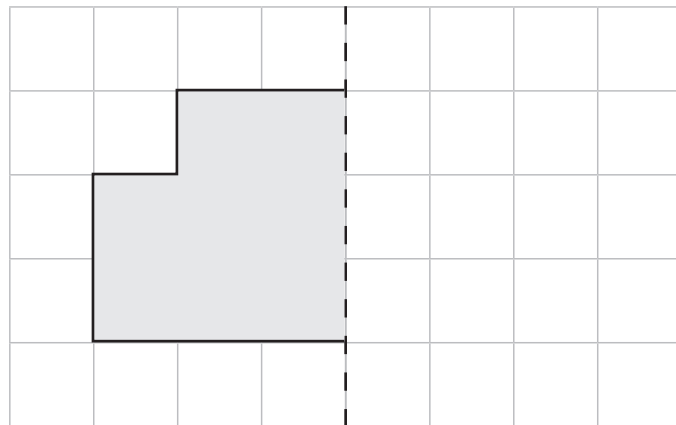
1

Draw the lines of symmetry on the rectangle.



2 marks

Reflect the shape in the mirror line.



2 marks

2

Expand the brackets.

$$3(x + 5)$$

1 mark

Solve the equation.

$$4x + 20 = 60$$

2 marks





Solve the inequality.

$$30 < 2y - 10$$

2 marks

3

The pictogram shows the number of books sold in a shop on Monday to Thursday one week.

Monday	
Tuesday	
Wednesday	
Thursday	
Friday	

Key:  represents 10 books

How many books were sold on Monday?

1 mark

How many books were sold on Tuesday?

1 mark

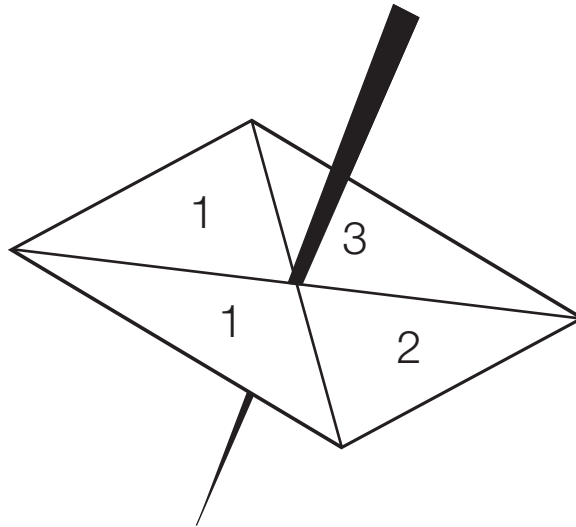
25 books were sold on Friday.

Use this information to complete the pictogram.

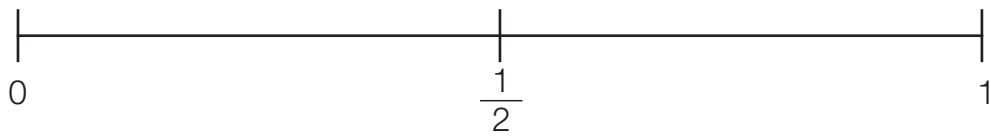
1 mark

4

Huan spins a four-sided spinner.



On the probability scale, mark with a cross (X) the probability that the spinner lands on 1



1 mark

Write down the probability that the spinner lands on 3

1 mark

5

Brett has 20 pens and pencils.

They are all red or blue.

Complete the two-way table.

	Red	Blue	Total
Pens		6	
Pencils	4		11
Total			20

2 marks

6

Work out

$$2^3$$

1 mark

$$2 + 6 \times 7$$

1 mark

7

How many seconds are there in an hour?

2 marks

Jim drives an average of 91.3 miles a week.

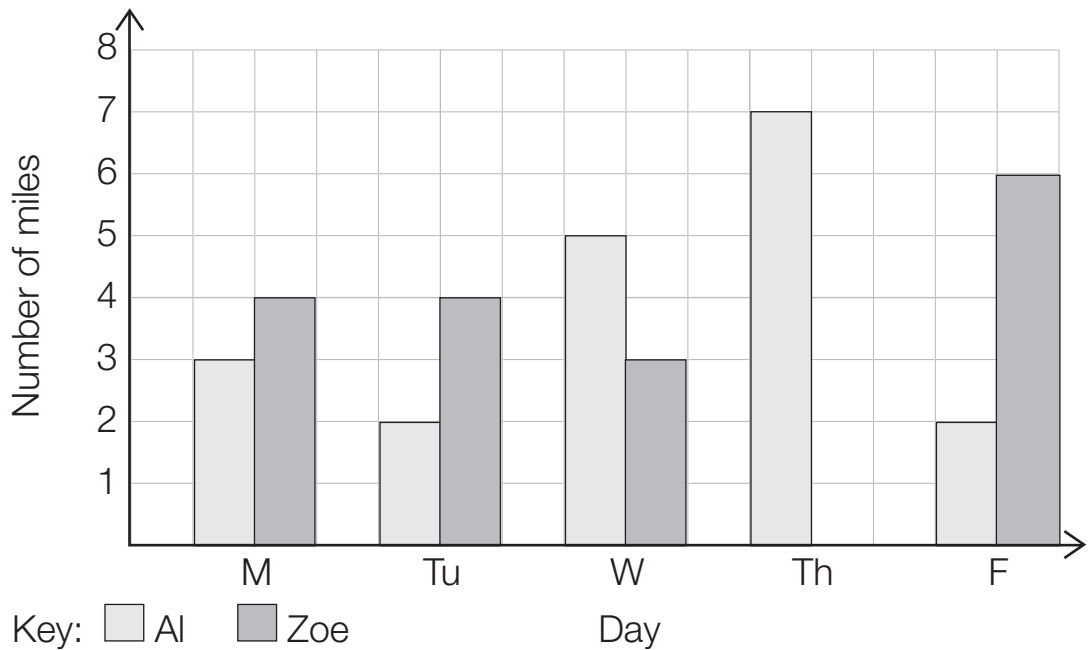
Work out an estimate for the number of miles Jim drives in a year.

Show your working.

2 marks

8

Here is a bar chart showing the number of miles Al and Zoe run from Monday to Friday in a week.



How much further does Al run on Wednesday than Zoe?

miles

1 mark

Zoe runs 5 miles on Thursday.

Use this information to complete the bar chart.

1 mark

What is the modal distance run by Zoe that week?

miles

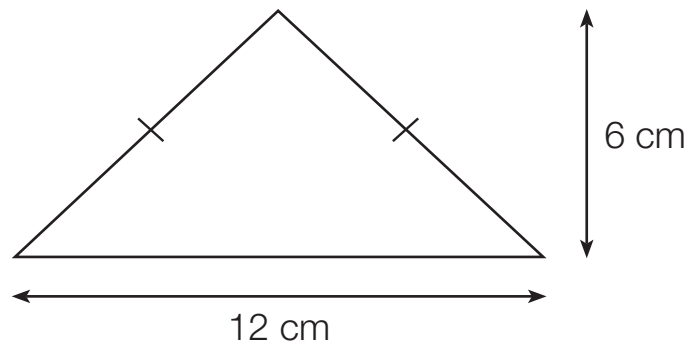
1 mark

Work out the range of the distances run by AI that week.

miles

1 mark

9



What is the mathematical name of this triangle?

_____ 1 mark

Find the area of the triangle.

_____ **cm²**

_____ 2 marks

10

The n^{th} term of a sequence is $2n - 3$

Find the 25th term of the sequence.

1 mark

The n^{th} term of another sequence is $(n + 5)^2$

Which is the 5th term of this sequence?

Circle your answer.

10**20****30****100**

1 mark

11

Work out the calculation, giving your answer in its simplest form.

$$\frac{3}{5} \times \frac{5}{9}$$

2 marks

12

Write the ratio in its simplest form.

500 : 200

1 mark

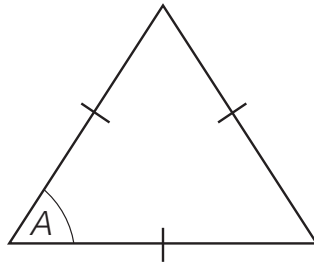
In a scale drawing 2 cm represents 5 m.

What distance on the scale drawing represents a real-life distance of 20 m?

2 marks

13

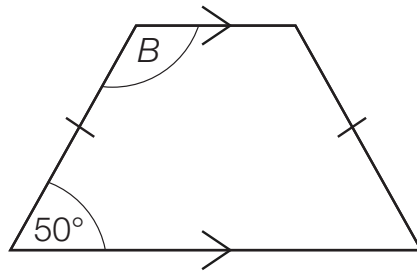
Work out the size of angle A.

Diagrams not drawn accurately.**A =**

°

1 mark

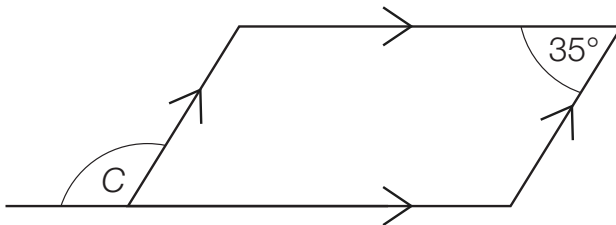
Work out the size of angle B.

**B =**

°

1 mark

Work out the size of angle C.

**C =**

°

2 marks

END OF TEST

[BLANK PAGE]

Please do not write on this page.

[BLANK PAGE]

Please do not write on this page.

[BLANK PAGE]

Please do not write on this page.