

Summer Assessment

Year 8

Mathematics

Core: Calculator allowed

Time allowed: 45 minutes

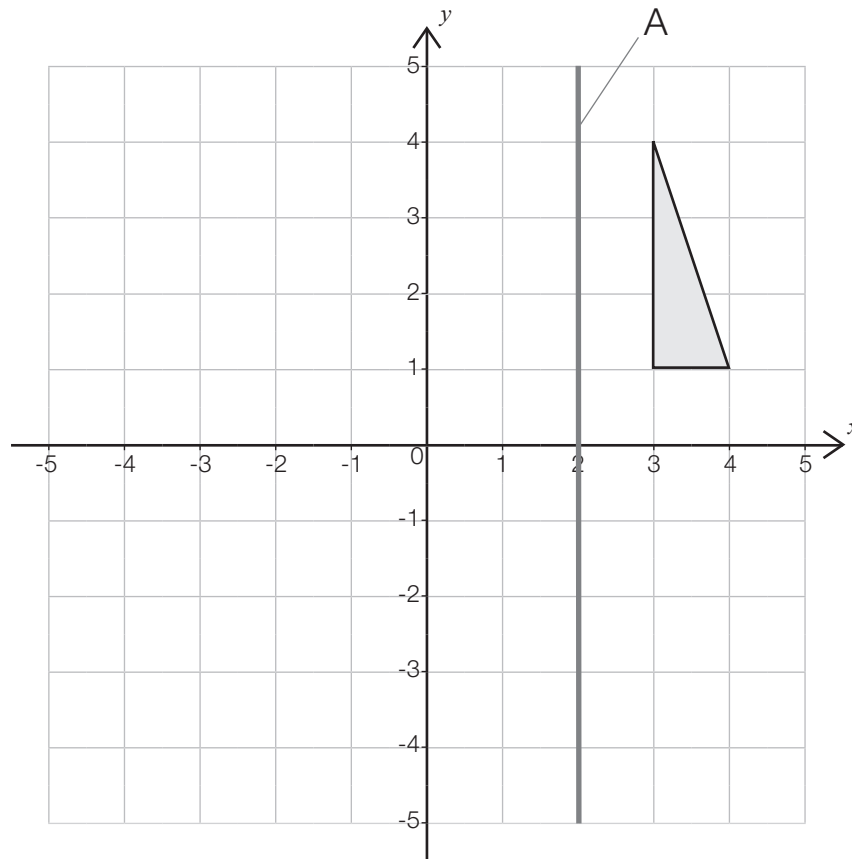
First name						
Middle name						
Last name						
Date of birth	Day		Month		Year	
Teacher						

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For more information, please visit www.whiterosemaths.com



1

Reflect the triangle in the line labelled A.



2 marks

What is the equation of the line labelled A?

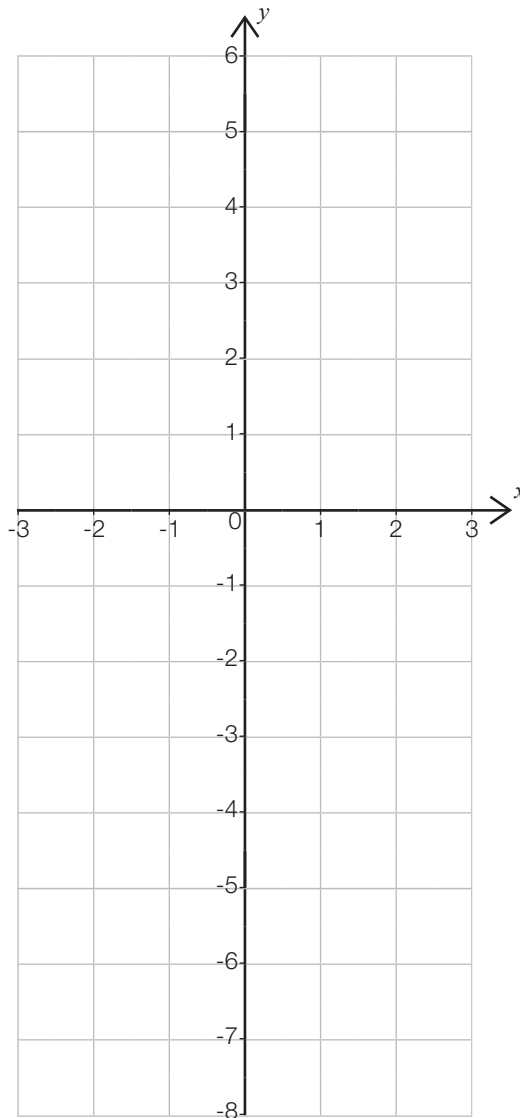
Circle your answer.

$x = 2$ $y = 2$ $y = x + 2$ $x = y + 2$

1 mark

2Complete the table of values for $y = 3x - 1$

x	-2	-1	0	1	2
y	-7				5

2 marksOn the grid below plot the graph of $y = 3x - 1$ for values of x from -2 to 2 

2 marks

3

Show that

$$3(d + 2) + 3d + 1 \equiv 6d + 7$$

2 marks

Hence or otherwise solve the equation

$$3(d + 2) + 3d + 1 = 52$$

2 marks

4

A group of 24 people were asked to state their favourite type of film.

The number of people who chose comedy is shown in the table.

- A quarter of the people chose romance.
- $\frac{3}{8}$ of the people chose action.
- The rest chose horror.

Complete the tally chart.

Type of film	Tally	Frequency
Romance		
Comedy		
Action		
Horror		

3 marks

5

Dora and Teddy going are on holiday to Spain.

Dora changes £200 into euros (€).

The exchange rate is £1 = €1.12

Work out how many euros (€) Dora receives.

2 marks

Teddy has €800

He spends 65% of his euros (€) on a hotel bill.

How many euros (€) does Teddy have left?

2 marks

6

Dani wants to find out how much money people spend on books.
She uses this question.

How much do you spend on books?

£5 - £10

£10 - £20

£20 - £50

Write down one thing wrong with this question.

1 mark

Design a better question to find out how much people spend on books.

2 marks

7

Here are the ages of 5 people.

7

51

14

7

11

Work out the range of these ages.

1 mark

Find the median age.

1 mark

Work out the mean age.

2 marks

Explain why the median age might be more representative of this data than the mean.

1 mark

8

A bear sleeps for 18 hours a day.

What percentage of a day is the bear asleep?

%

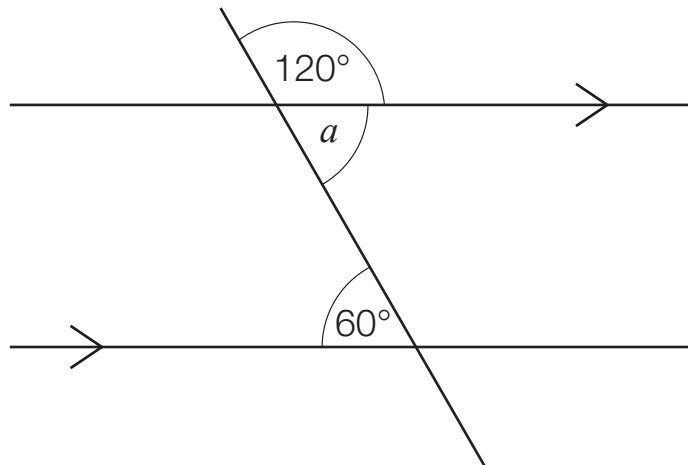
2 marks

Find the missing numbers.

20% of 80 is

20% of is 80

2 marks



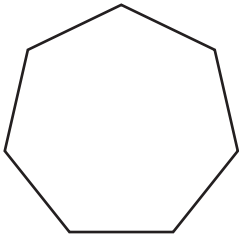
Give **two** reasons why angle $a = 60^\circ$

Reason 1:

Reason 2:

2 marks

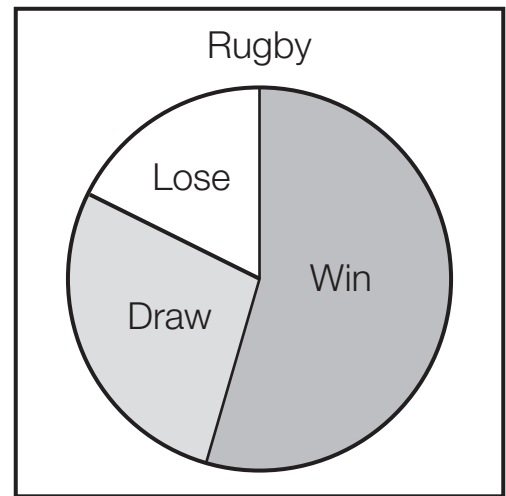
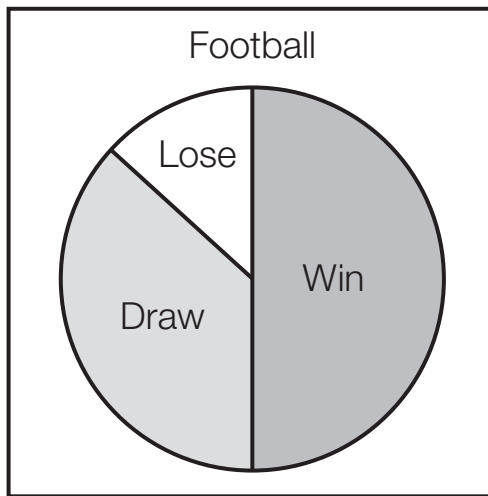
What is the sum of the interior angles of a **7-sided** polygon?



 2 marks

10

The pie charts show the results of a school's football and rugby matches.



Estimate the percentage of games the rugby team lost.

1 mark

Ron says,

'The rugby team won more games than the football team'.

Explain why Ron may be incorrect.

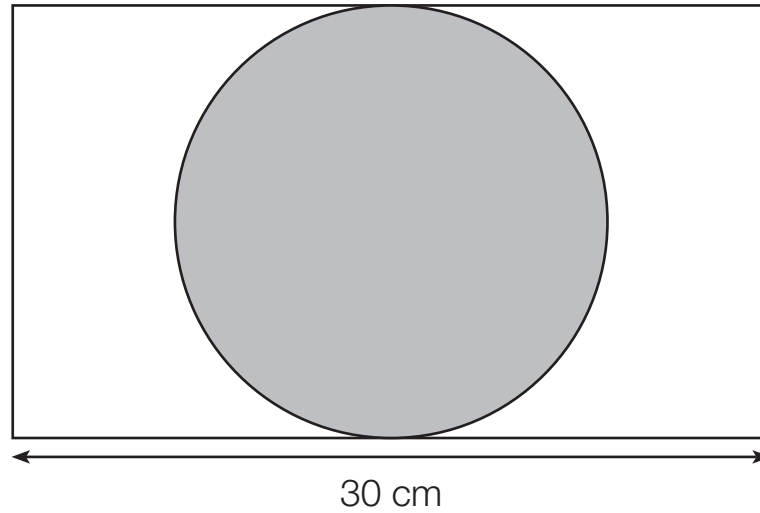
1 mark

11

Phoebe has some sheets of rectangular card.

Each sheet of card is **30 cm long** and **20 cm wide**.

Phoebe cuts out a circle from a sheet of card.



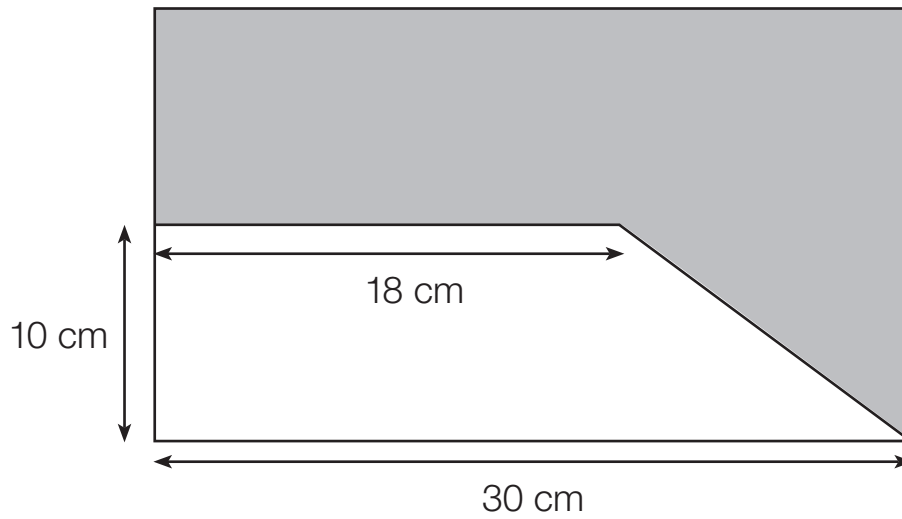
What is the area of the circle?

Give your answer to three significant figures.

cm²

2 marks

Phoebe then cuts out a trapezium from another piece of card.



What is the area of the trapezium?

cm²

2 marks

END OF TEST

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