



THIRD SPACE
LEARNING

Mathematics

Paper 3

(Calculator)

Foundation Tier

AQA GCSE

SET 4

Mathematics Paper 3 (Calculator) Foundation Tier Edexcel

GCSE SET 4

Name

Total marks

Paper length: 1hr 30mins



Instructions

- Use black ink or ball-point pen.
- Fill in the boxes at the top of this page with your name, centre number and candidate number.
- Answer all questions.
- Answer the questions in the spaces provided – there may be more space than you need.
- You must show all your working.
- Diagrams are NOT accurately drawn, unless otherwise indicated.
- Calculators may be used.

Information

- The total mark for this paper is 80
- The marks for each question are shown in brackets – use this as a guide as to how much time to spend on each question.

Advice

- Read each question carefully before you start to answer it.
- Keep an eye on the time.
- Try to answer every question.
- Check your answers if you have time at the end.

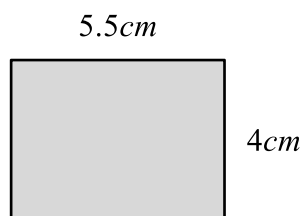
Question	Mark
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29	

You must have: Ruler graduated in centimetres and millimetres, protractor, pair of compasses, pen, HB pencil, eraser. Tracing paper may be used.

This practice paper is based on the topics from the **advanced information for the November 2025 exam series**.

Please note, this practice paper is an example to help revision, these topics can be tested in other ways and other topics may be included in the actual papers

1



Work out the area of this rectangle.

Circle your answer.

[1 mark]

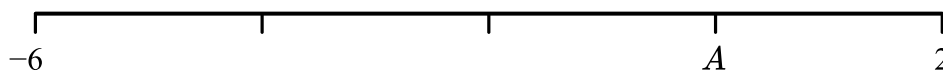
19cm^2

9.5cm^2

22cm^2

11cm^2

2 Here is a number line.



Which number is at A ?

Circle your answer.

[1 mark] -2 -1 0 1

3 Circle the number that is a factor of 20.

[1 mark]

3

4

8

40

4 What is the time 3 hours and 20 minutes after 7.45am?

[1 mark]

Answer _____

5 Work out $\frac{1}{5}$ of 24.

[1 mark]

Answer _____

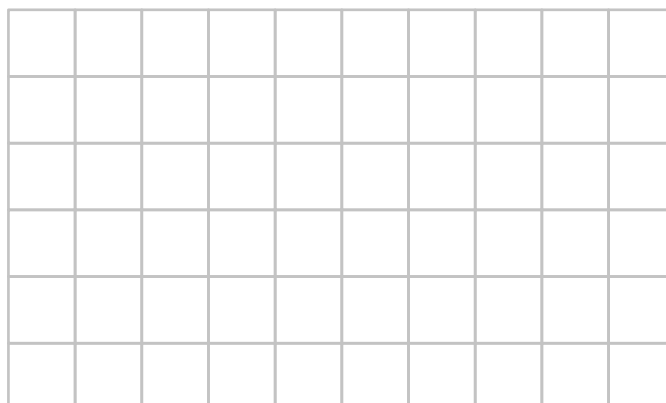
6 On the grid, draw a quadrilateral with

2 lines of symmetry

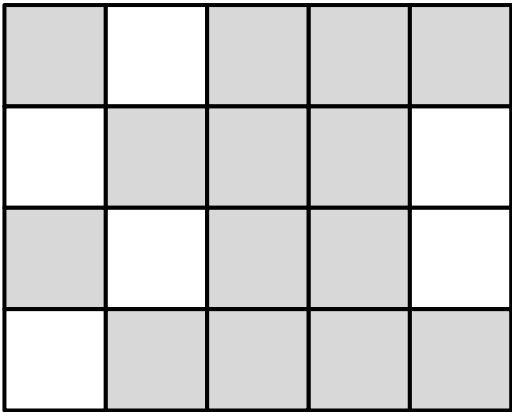
2 acute angles

2 obtuse angles

[2 marks]



7



What fraction of the shape is shaded?
Give your answer in its simplest form.

[2 marks]

Answer _____

8 The table shows the total number of pumpkins and toffee apples sold in a shop in the three weeks before Halloween.

	Week 1	Week 2	Week 3
Number of pumpkins	21	55	87
Number of toffee apples	64	52	49

Over the 3 weeks, were more pumpkins or toffee apples sold?
Show how you decide.

[3 marks]

Answer _____

9 Gavin thinks of a number.

He divides his number by 4 and then adds 8.
His answer is 29.

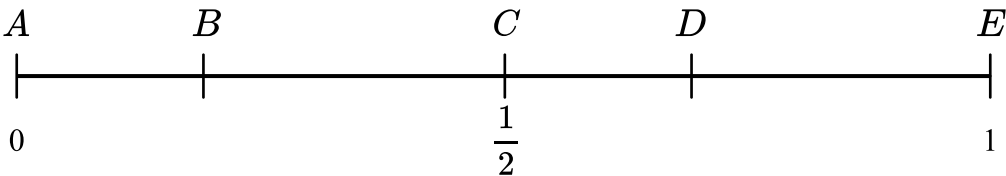
What number did Gavin think of?

[3 marks]

Answer _____

10 Maia rolls a fair, 6 sided dice.

The probability scale shows the probability of different events.

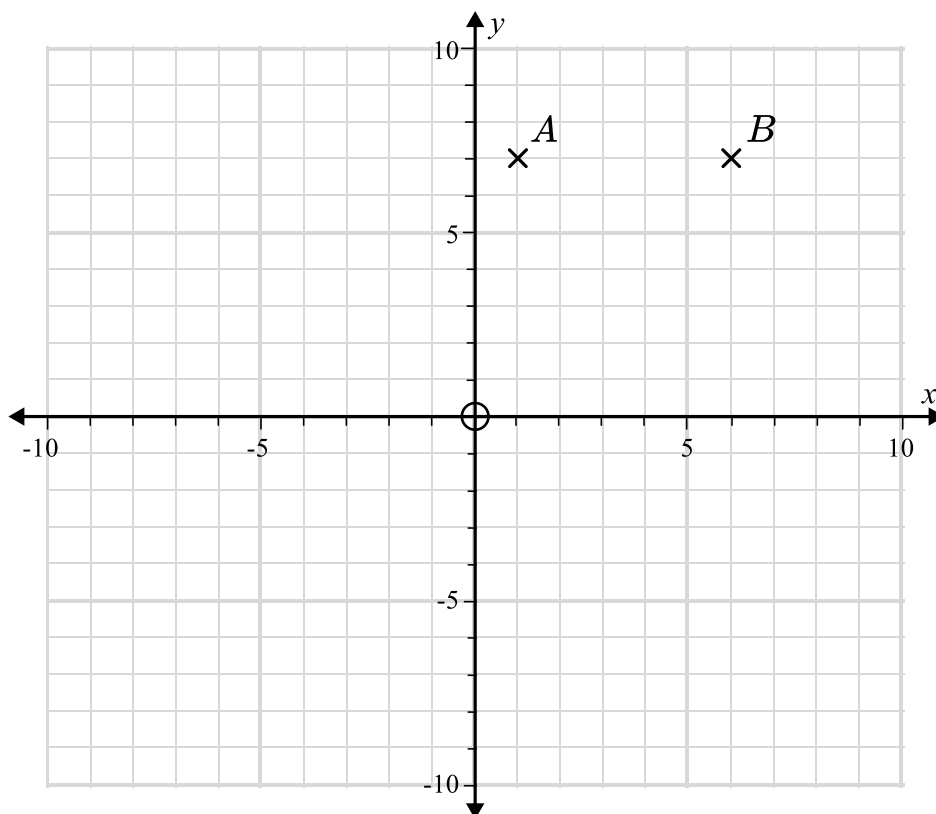


In the table, write the letter corresponding to each of the following events.

[3 marks]

Maia rolls an even number	
Maia rolls a factor of 6	
Maia rolls a 7	

11 Here is a centimetre grid.



(a) Write down the coordinates of point A

[1 mark]

Answer (_____ , _____)

(b) On the grid, mark with a cross (\times) the point with coordinates $(1, -2)$

Label the point C .

[1 mark]

(c) A fourth point is added to form a rectangle.

Write down the coordinates of this point.

[2 marks]

Answer (_____ , _____)

- 12** A baker needs to make 17 batches of cupcakes.

Each batch needs 4 eggs.

The baker has 6 boxes of eggs.

There are 12 eggs in each box.

Show that the baker will have 4 eggs left over.

[2 marks]

- 13** In a school sports cupboard there are 30 footballs, 24 rugby balls and 54 tennis balls.

Write the ratio footballs : rugby balls : tennis balls in its simplest form.

[2 marks]

Answer _____

14 Lowri measures all the angles in a quadrilateral.

Her results are 37° , 88° , 112° and 103° .

Explain why these results cannot be true.

[2 marks]

15 Work out $\frac{3.1 \times 7.8}{8 - 6.8}$

Give your answer as a decimal.

[2 marks]

Answer _____

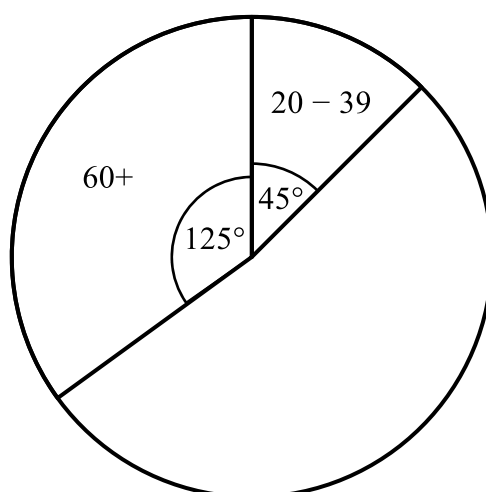
16 A hospital recorded the ages of people in A&E.

Here is an incomplete table and an incomplete pie chart showing the results.

Use the information to complete the table and the pie chart.

[5 marks]

Age	Frequency	Angle
0 – 19	21	
20 – 39		
40 – 59		
60 +	25	



17 (a) Round 3637 to 2 significant figures.

[1 mark]

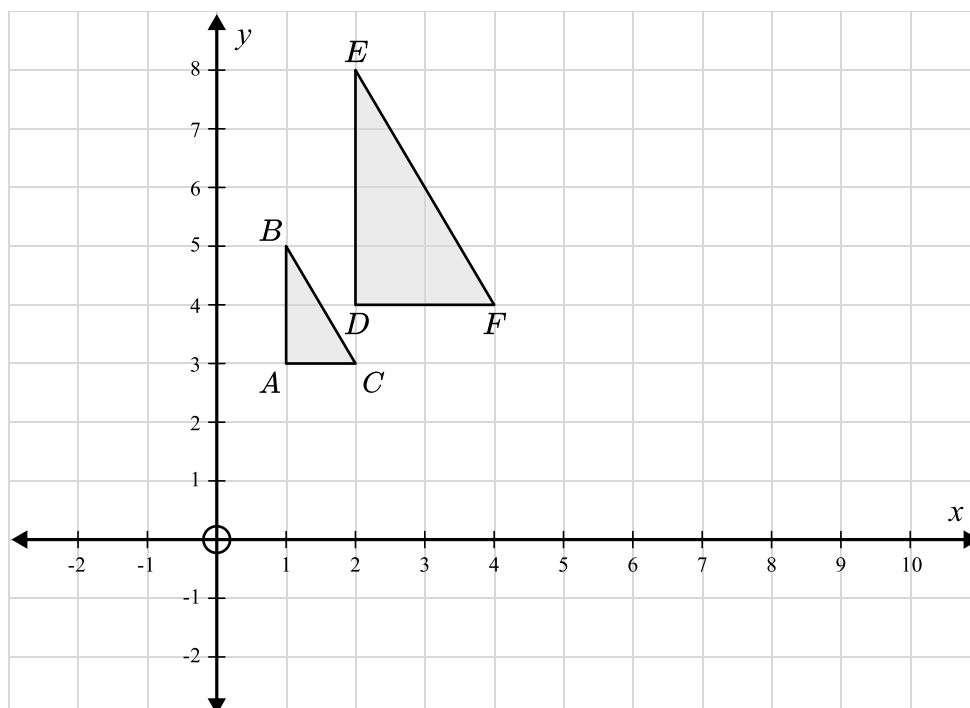
Answer _____

(b) Round 0.00352 to 1 significant figure.

[1 mark]

Answer _____

18 Here is a diagram showing triangle ABC and triangle DEF .



Describe fully the single transformation that maps triangle ABC onto triangle DEF .

[2 marks]

19 (a) Expand and simplify fully $4(y + 5) - 2(y + 4)$

[2 marks]

Answer _____

(b) Factorise $12x - 16$

[1 mark]

Answer _____

20 Change 1cm^3 to mm^3 .

Circle your answer.

[1 mark]

10mm^3

100mm^3

1000mm^3

100000mm^3

- 21** Jovy buys a car for £12000.
She sells the car for £10560.

Calculate the percentage loss that Jovy makes.

[3 marks]

Answer _____

- 22** Make p the subject of the formula $m = 4p - n$.

[2 marks]

Answer _____

23 Jacob's bike tyre has a diameter of 18 *inches*.

Jacob cycles 1*km*.

Given that 1 *inch* = 2.5*cm*, work out how many times Jacob's wheel rotates.

Give your answer to the nearest whole number.

[4 marks]

Answer _____

24 It takes 12 hours for 6 machines to make 1440 car parts.

How many hours would it take 8 machines to make the same number of parts?

[2 marks]

Answer _____

25 The table gives information about the number of siblings that the 30 children in class 6 have.

Number of siblings	Frequency	
0	4	
1	7	
2	10	
3	6	
4	3	

(a) Write down the modal number of siblings

[1 mark]

Answer _____

(b) Work out the mean number of siblings.

[3 marks]

Answer _____

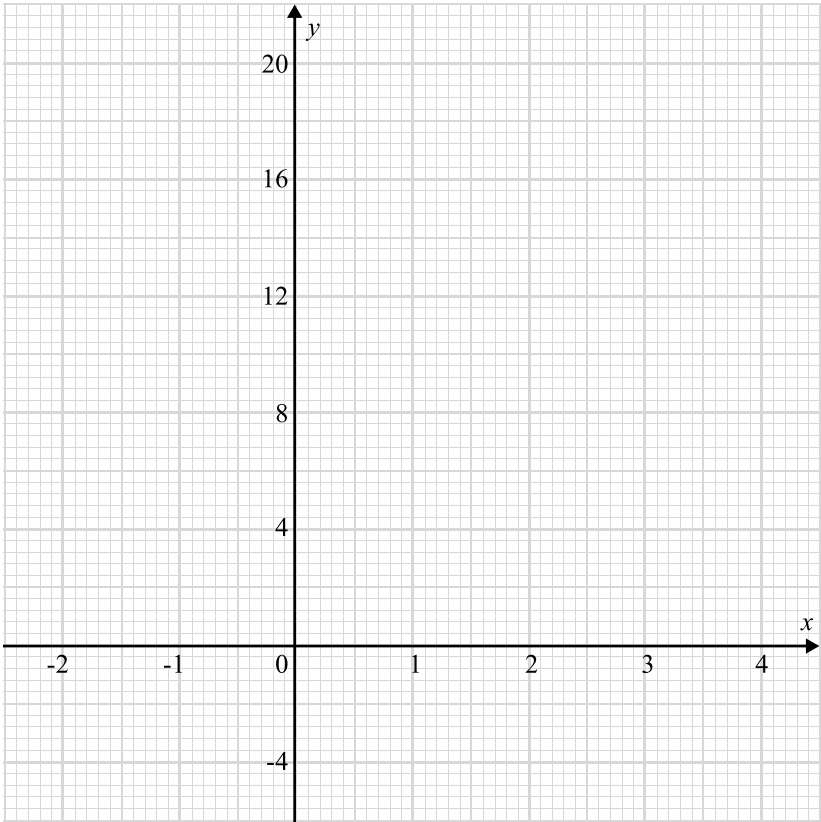
26 (a) Complete the table of values for $y = x^3 - 3x$.

[2 marks]

x	-2	-1	0	1	2	3
y		2		-2	2	

(b) On the grid, draw the graph of $y = x^3 - 3x$ for values of x from -2 to 3.

[2 marks]



(c) Use your graph to find an estimate to the solution of the equation

$$x^3 - 3x = 10$$

[2 marks]

Answer _____

- 27 P is the point with coordinate $(3, 4)$
 Q is the point with coordinate $(a, -2)$.

The gradient of the line PQ is 2

Work out the value of a .

[3 marks]

Answer _____

- 28** Jack bought a television for £360. The television was reduced by 20%.
Jack wants to calculate the original price of the television.

Jack does this calculation:

$$20\% \text{ of } 360 = 0.2 \times 360 = £72$$

$$£360 + £72 = £432$$

- (a)** Explain Jack's mistake

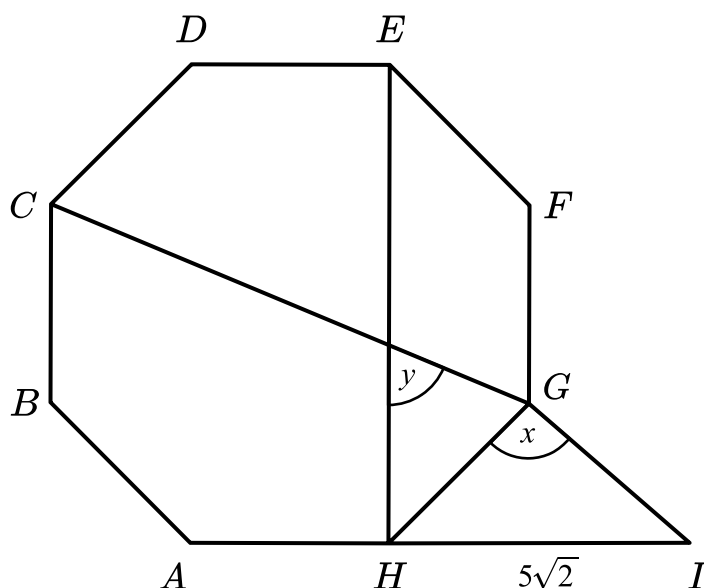
[1 mark]

- (b)** Jack also bought a laptop for £612. The laptop was reduced by 15%.
Work out the original price of the laptop.

[2 marks]

Answer _____

29



Here is a regular octagon and a triangle.

AHI is a straight line.

$GH = GI$

$HI = 5\sqrt{2} \text{ cm}$

(a) Show that angle x is 90° .

Give a reason for each stage of your working.

[3 marks]

Question continued on the next page

(b) Work out the size of angle y .

[3 marks]

Answer _____

(c) Work out the perimeter of the octagon, $ABCDEFGH$.

[4 marks]

Answer _____

End of Questions

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