



THIRD SPACE
LEARNING

Mathematics

Paper 1

(Non-Calculator)

Foundation Tier

AQA GCSE

SET 4

Mathematics Paper 1 (Non-Calculator) Foundation Tier AQA

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 not 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
1	
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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 Circle the largest number

[1 mark]

1.3 1.73 0.3 3.1

2 Circle value of the 6 in the number 5649.

[1 mark]

60 6 600 0.06

3 Circle the answer to 5^2 .

[1 mark]

25 10 125 2.5

4 Circle the fraction that is equivalent to 42%.

[1 mark]

$\frac{1}{42}$ $\frac{42}{200}$ $\frac{21}{50}$ $\frac{2}{4}$

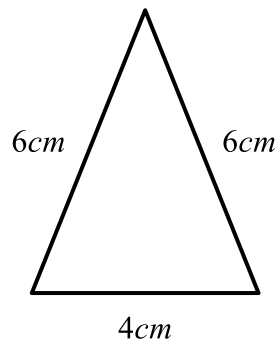
5 Simplify

[1 mark]

$$4p + 7p - 2p$$

Answer _____

6 Here is a triangle.

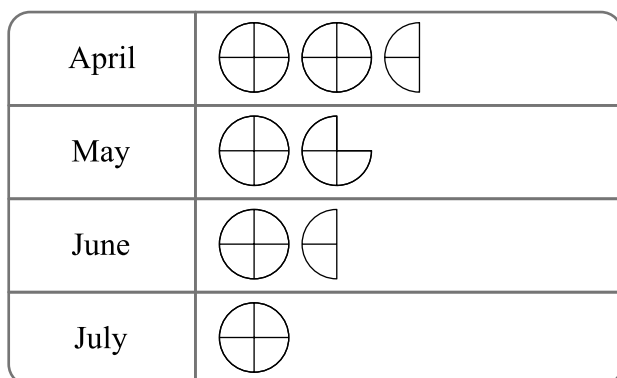



Liam says that this is an equilateral triangle.

Is Liam correct? Explain your answer.

[1 mark]

- 7 The pictogram shows the number of rainy days over a number of months.



Key:  = days

It rained on 20 days in April.

- (a) Complete the key.

[1 mark]

- (b) On how many more days did it rain in May than in July?

[2 marks]

Answer _____

- 8 (a) Solve $n + 7 = 20$

[1 mark]

$n =$ _____

- (b) Solve $3m = 75$

[1 mark]

$m =$ _____

9 Olivia buys

1 box of cereal for £1.80

1 bottle of milk for 90p

3 bananas for 25p each

Olivia pays with a £5 note.

How much change should Olivia get?

[3 marks]

Answer _____

10 (a) The temperature inside Sofia's house is 21°C .

The temperature outside Sofia's house is 30°C lower than the temperature inside her house.

Circle the temperature outside of Sofia's house.

[1 mark]

-51°C

52°C

9°C

-9°C

(b) Complete the following statement by choosing the correct symbol from the box below.

[1 mark]

<>=

-7°C

-12°C

- 11** On a farm there are 250 animals.

$\frac{4}{5}$ of the animals are cows.

There are 2 dogs.

The rest of the animals are chickens or goats.

The ratio of chickens:goats is 3:1.

Work out the number of chickens on the farm.

[3 marks]

Answer _____

- 12 (a)** Here are 7 numbers.

9 11 6 5 9 2 3

Write down the mode.

[1 mark]

Answer _____

- (b)** Work out the median.

[2 marks]

Answer _____

- 13 (a)** There are 31 children in a class.
4 of them are left-handed.

One child is picked at random.

Write down the probability that the child is left-handed.

[1 mark]

Answer _____

- (b)** Approximately 10% of the world's population is left-handed.

Tick one box.

☐

Less than 10% of this class are left handed

☐

Exactly 10% of this class are left handed

☐

More than 10% of this class are left handed

Show working to support your answer.

[2 marks]

14

$$C = 15 + 10p$$

Work out the value of C when $p = 4$ **[2 marks]**

Answer _____

15 Work out 3.7×24 **[2 marks]**

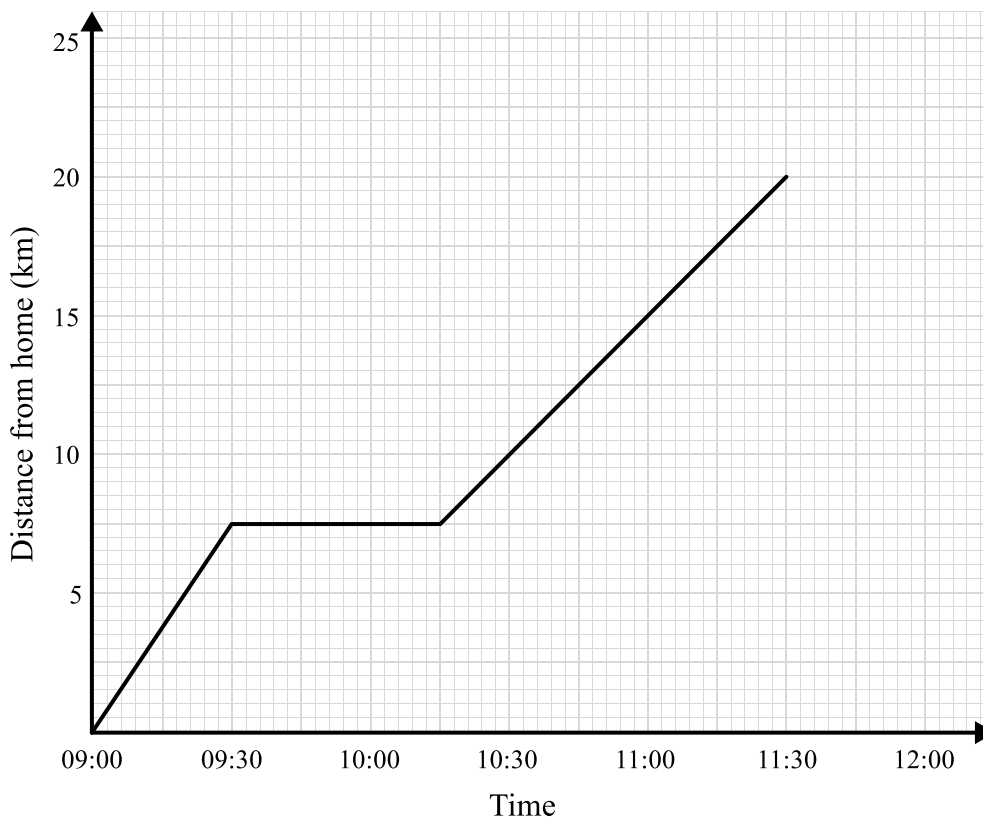
Answer _____

16 Priti went for a ride on her bicycle.

She rode from her home to her friend's house.

She stayed at her friend's house for a while and then continued on to the shop.

Here is Priti's travel graph.



(a) What was Priti's average speed during the first part of her journey?

[2 marks]

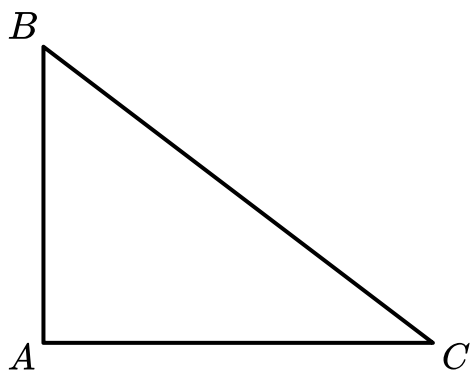
Answer _____ *km/h*

(b) Was Priti's average speed faster during the first or second part of her journey?

Explain how you know.

[2 marks]

17 ABC is a triangle.



The ratio of the sides $AB : AC : BC$ is $3 : 4 : 5$.

The perimeter of the triangle is 48cm .

Find the length of the side AB .

[3 marks]

Answer _____ cm

18 (a) The term-to-term rule for a sequence is

add 8 then divide by 2

The 2nd term of the sequence is 40.

Work out the 4th term.

[2 marks]

Answer _____

(b) Here is a rule for a different sequence

After the first two terms, each term is the sum of the previous two terms.

The first five terms are

p 18 28 q r

Work out the values of p , q and r .

[2 marks]

$p =$ _____

$q =$ _____

$r =$ _____

- 19** Astrid's house is $2\frac{1}{2}$ miles west of Felix's house. Hannah's house is $5\frac{1}{3}$ miles east of Astrid's house.
How far is it from Felix's house to Hannah's house?

Give your answer as a mixed number

[4 marks]

Answer _____

20 (a) Gary works from 9.30am-12.15pm and from 1pm to 5.30pm, 5 days per week.
Put a tick next to the number of hours Gary works each day.

[1 mark]

6 hours 45 minutes	
7 hours 15 minutes	
7 hours 45 minutes	
8 hours 15 minutes	

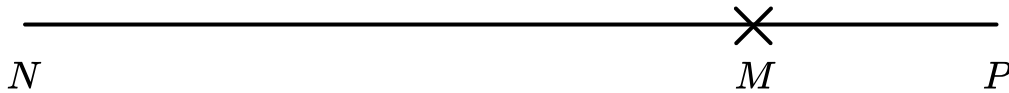
(b) Gary gets paid £16 per hour.
How much does Gary get paid each week?

[3 marks]

Answer £ _____

- 21** Use a ruler and compasses to construct the line perpendicular to the line NP at the point M .
You must show **all** construction lines.

[2 marks]

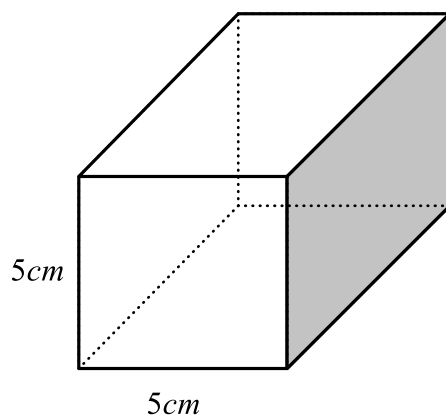


- 22** Write 132 as a product of its prime factors.
Give your answer in index form.

[2 marks]

Answer _____

23 Here is a cuboid.



The total surface area of the cuboid is 210cm^2 .

Work out the volume of the cuboid.

[5 marks]

Answer _____ cm^3

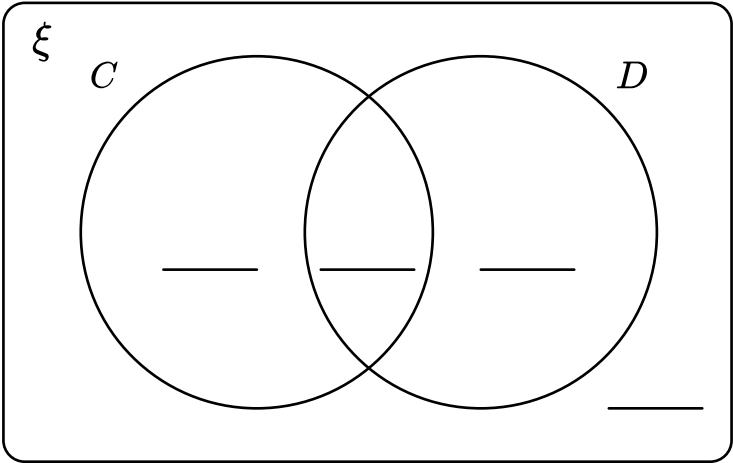
24 (a) Here is some information about a group of 60 students.

- $\frac{1}{3}$ of the students own neither a cat nor a dog.
- 27 students own a dog.
- 24 students own a cat.

Complete this Venn diagram to represent this information.

[3 marks]

- ξ = 60 students
- C = students who own a cat
- D = students who own a dog

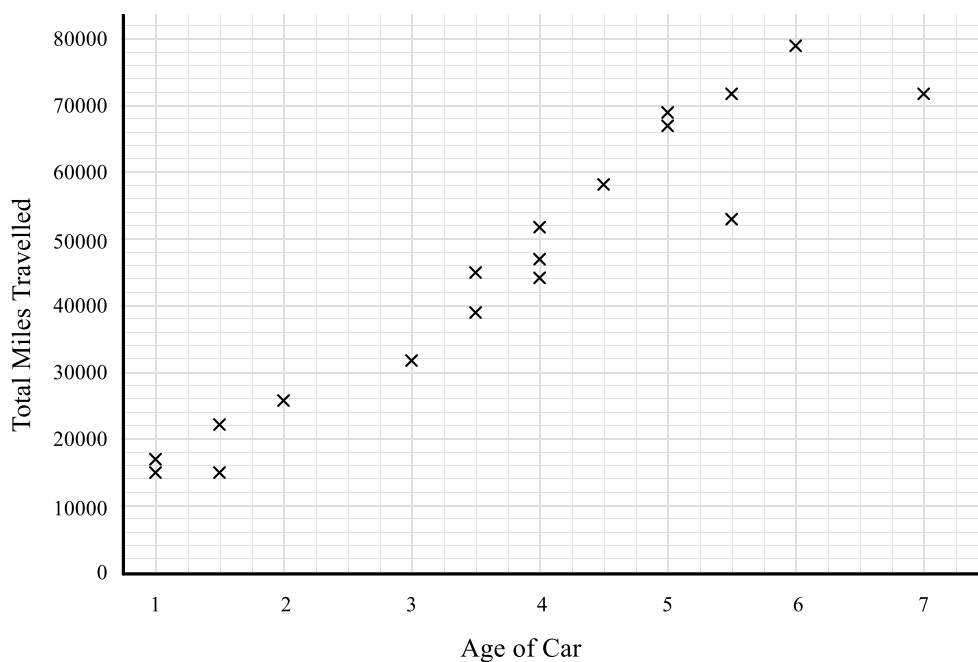


- (b) One of the students is chosen at random.
Find the probability that this student owns a cat and a dog.

[2 marks]

Answer _____

- 25** The scatter diagram shows information about the age and total miles covered by some cars belonging to a certain company.



- (a)** Write down the type of correlation shown.

[1 mark]

Answer _____

- (b)** Another car is 2.5 years old.

Use a line of best fit to estimate the total distance travelled by this car.

[2 marks]

Answer _____ *miles*

26 (a) Solve $p < \frac{p+6}{3} + 3$

[3 marks]

Answer _____

(b) Factorise $x^2 + 3x - 40$

[2 marks]

Answer _____

27 a is 20% less than b .

Circle the ratio $a:b$

[1 mark]

10:12

2:10

8:10

10:8

28 Write down the exact value of $\sin(30)$.

[1 mark]

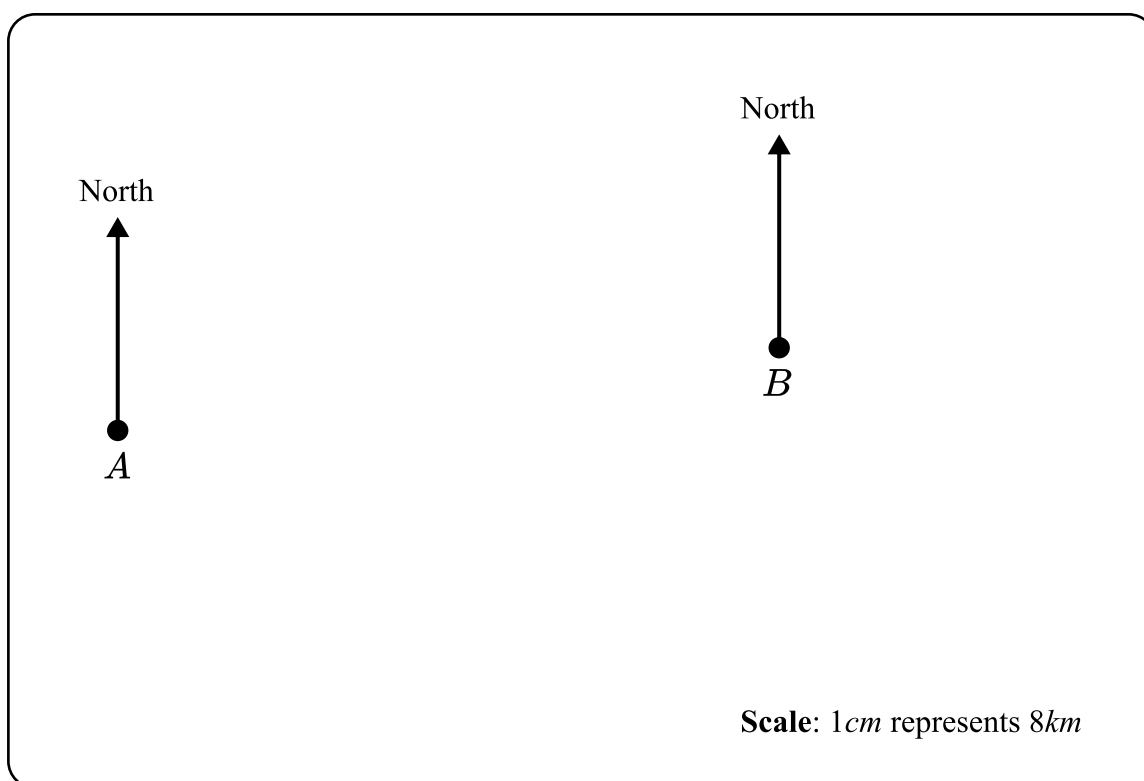
Answer _____

29 The scale drawing shows town A and town B .

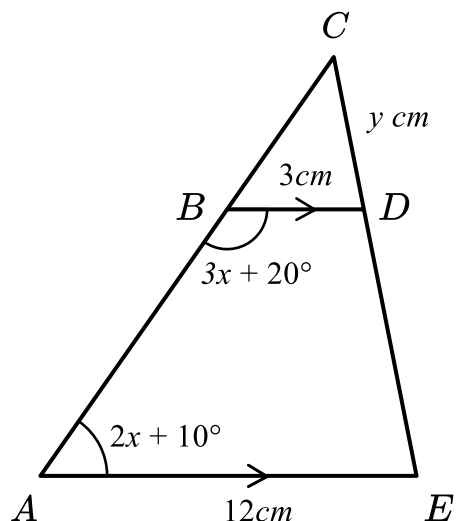
The scale is 1cm represents 8km .

Livvy needs to get to a location between town A and town B that is on a bearing of 075° from town A and 32km from town B . Mark the location on the map and label it C .

[3 marks]



30 ACE is a triangle.



ABC and CDE are straight lines.

AE is parallel to BD .

Angle $BAE = 2x + 10^\circ$

Angle $ABD = 3x + 20^\circ$

$BD = 3 \text{ cm}$

$CD = y \text{ cm}$

$AE = 12 \text{ cm}$

(a) Work out the value of x .

[3 marks]

Answer _____

Question continued on the next page

(b) Find an expression, in terms of y , for the length of CE .

[2 marks]

Answer _____

End of Questions

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