



Rewarding Learning

General Certificate of Secondary Education
November 2025

Centre Number

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Candidate Number

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Mathematics

Unit M5 Paper 1
(Non-Calculator)

Foundation Tier

[GMC51]



GMC51

THURSDAY 20 NOVEMBER, 9.15am–10.15am

TIME

1 hour.

INSTRUCTIONS TO CANDIDATES

Write your Centre Number and Candidate Number in the spaces provided at the top of this page.

You must answer the questions in the spaces provided.

Do not write outside the boxed area on each page, on blank pages or tracing paper.

Complete in black ink only. **Do not write with a gel pen.**

Questions which require drawing or sketching should be completed using an HB pencil. All working **must** be clearly shown in the spaces provided. Marks may be awarded for partially correct solutions.

You **must not** use a calculator for this paper.

Answer **all nineteen** questions.

INFORMATION FOR CANDIDATES

The total mark for this paper is 50.

Figures in brackets printed down the right-hand side of pages indicate the marks awarded to each question or part question.

You should have a ruler, compasses and a protractor.

The Formula Sheet is on page 2.

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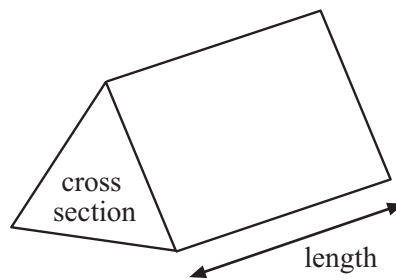
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Formula Sheet

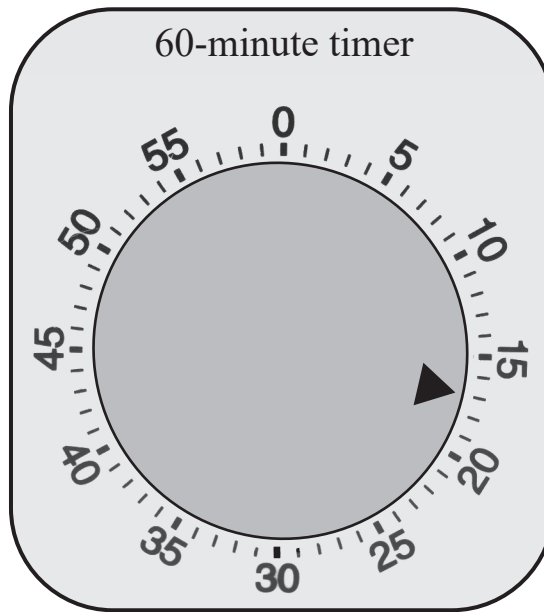
$$\text{Area of trapezium} = \frac{1}{2}(a + b)h$$



$$\text{Volume of prism} = \text{area of cross section} \times \text{length}$$

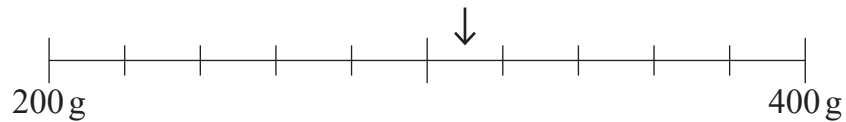


1 (a) What reading is shown on the 60-minute timer?



Answer _____ minutes [1]

(b) Penny says the arrow on the scale below shows a reading of 310 g.



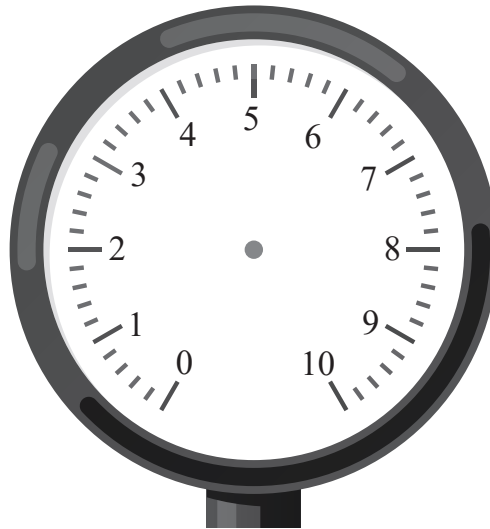
Explain why she is correct.

Answer _____ [1]

[Turn over



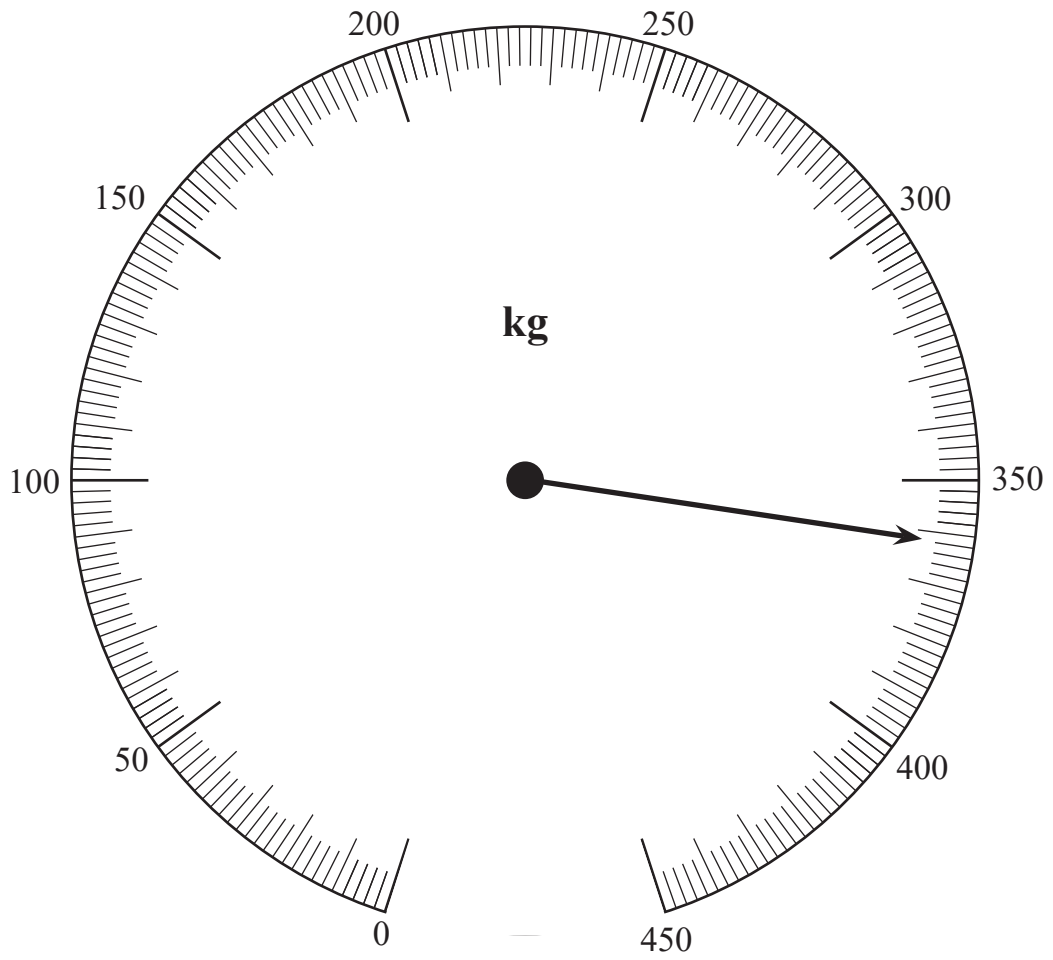
(c) Mark with an arrow a reading of 3.6 on the gauge below.



[1]



(d) What reading is shown on the weighing scale?



Answer _____ kg [1]



2 The map shows some places in Ireland.



(a) Which place on the map is furthest South?

Answer _____ [1]

(b) What compass direction is Limerick from Mullingar?

Answer _____ [1]



3 Some events are given below.

Event A A fair coin is tossed and it lands on heads

Event B A fair dice, numbered 1 to 6, is rolled and lands on the number 7

Event C A person chosen at random is right-handed

Event A has an evens chance of occurring so has been placed in the Evens box.

| Impossible | Unlikely | Evens | Likely | Certain |
|------------|----------|-------|--------|---------|
| | | A | | |

(a) Place Events B and C in the correct boxes. [2]

(b) Write an Event D that is certain.

Event D _____
_____ [1]

[Turn over



- 4 A band played a concert in four different cities.

The numbers in attendance are shown in the table.

| City | Numbers in attendance |
|---------|-----------------------|
| Lisburn | 270 |
| Belfast | 650 |
| Armagh | 380 |
| Newry | |

A total of 1500 people attended the concerts.

How many attended in Newry?

Answer _____ [4]



5 Circle the best estimate for each of the following.

(a) 57.31×10.01

60 600 6000 [1]

(b) $611 \div 51$

10 11 12 [1]

6 (a) Write down the next term in this sequence.

2, 8, 14, 20, 26, 32, _____ [1]

(b) Write down the rule for this sequence.

43, 34, 25, 16, 7, ...

Answer _____ [1]

[Turn over]

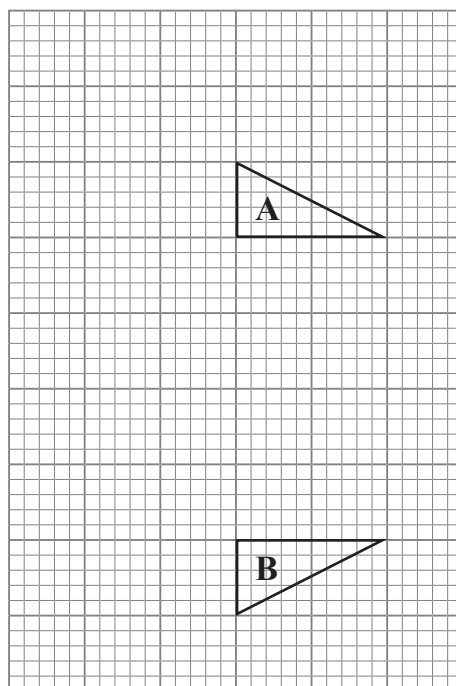
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7 (a) Triangle A is reflected and its image labelled B.

Draw the mirror line on the grid.

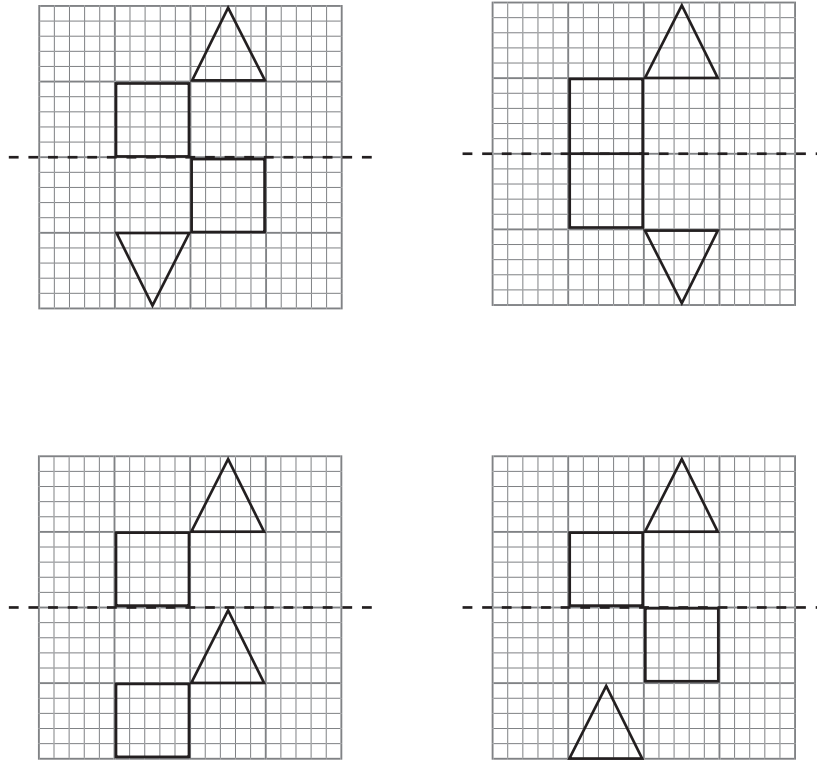


[1]



(b) Which one of the reflections is correct?

Circle your answer.



[1]



8 There are 11 boys and 14 girls in a class.

(a) One student is chosen at random from the class.

What is the probability that a girl is chosen?

Give your answer as a fraction.

Answer _____ [1]

(b) The probability that a student in the class has a mobile phone is $\frac{4}{5}$

How many students in the class have a mobile phone?

Answer _____ [1]



9 Jonah's dad is 40 years old.

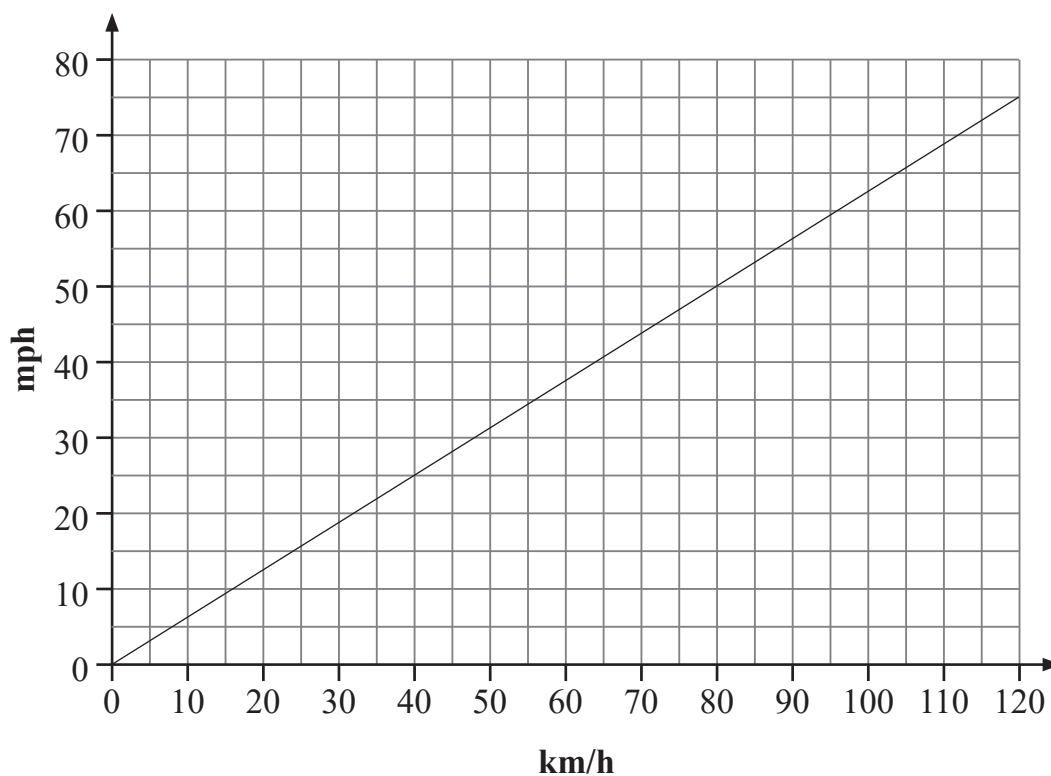
Jonah is a fifth of his dad's age.

What will be the difference in their ages in 6 years' time?

Answer _____ years [3]



10



The take-off speed of a jet is 240 kilometres per hour (km/h).

Use the graph to find the take-off speed of this jet in miles per hour (mph).

Answer _____ mph [2]



11 Pat's car journey took 7 hours.

She spent 15% of the journey stopped at service stations.

How many **minutes** of the journey were spent driving?

Show your working out clearly.

Answer _____ minutes [4]

[Turn over

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24GMC5115

12 (a) Fill in the two missing numbers in this sequence.

_____ , 1, 6, 13, 22, 33, _____ [2]

(b) Each new number in a different sequence is found by using the rule

“Square the previous term and add 7”

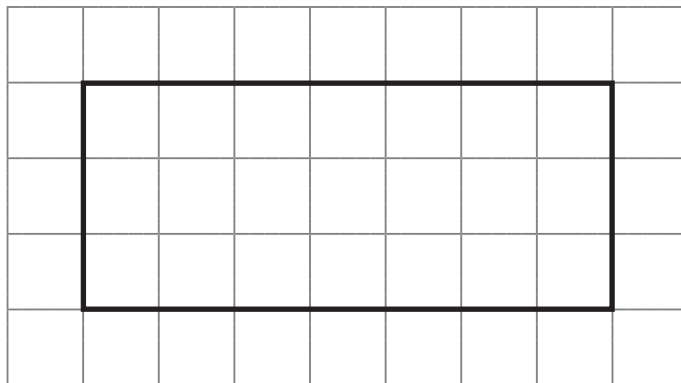
The first term is 3

Find the second term.

Answer _____ [1]



13 This is a scale drawing of the floor of Jacob's warehouse.



The scale is 1 cm = 5 m

Work out the actual perimeter of the floor of the warehouse.

Answer _____ m [3]

[Turn over



14 Jenny has some tins of soup.

4 are lentil

6 are lentil and bacon

3 are chicken

One tin is taken at random.

What is the probability of taking a tin which

(a) is chicken, _____ [1]

(b) is mushroom, _____ [1]

(c) contains lentils? _____ [1]

15 The ratio of flour to sugar is 7 : 6 in a recipe.

There are 180 grams of sugar.

How many grams of flour are there?

Answer _____ grams [2]



16 Chloe goes on holiday.

She spends $\frac{3}{7}$ of her time at the beach.

She spends 25% of her time sightseeing.

The rest of her time is spent at the hotel.

What **fraction** of Chloe's time is spent at the hotel?

Show your working out clearly.

Answer _____ [3]

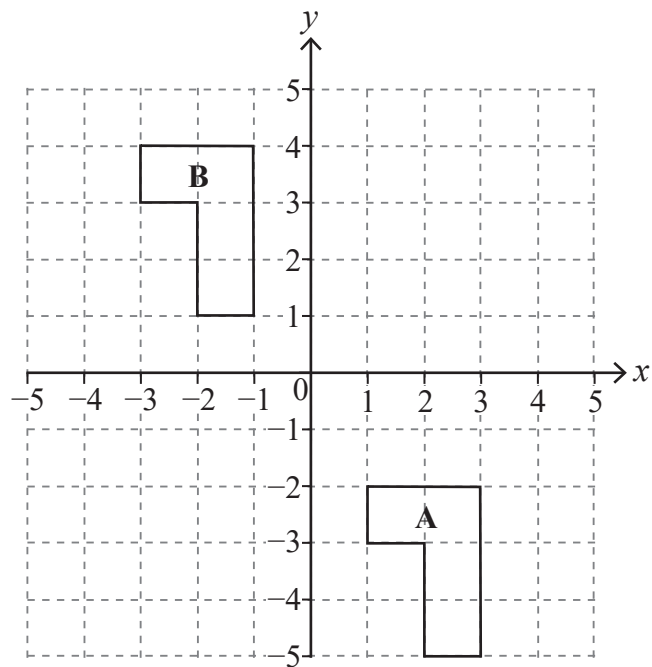
[Turn over

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24GMC5119

17 Describe fully the single transformation that maps B to A.



Answer _____ [2]

18 The length of a sports pitch is 92 m to the nearest metre.

Write down the shortest possible length of the sports pitch.

Answer _____ m [1]



19 Find the sum of the angles in the polygon ABCDEFGH.

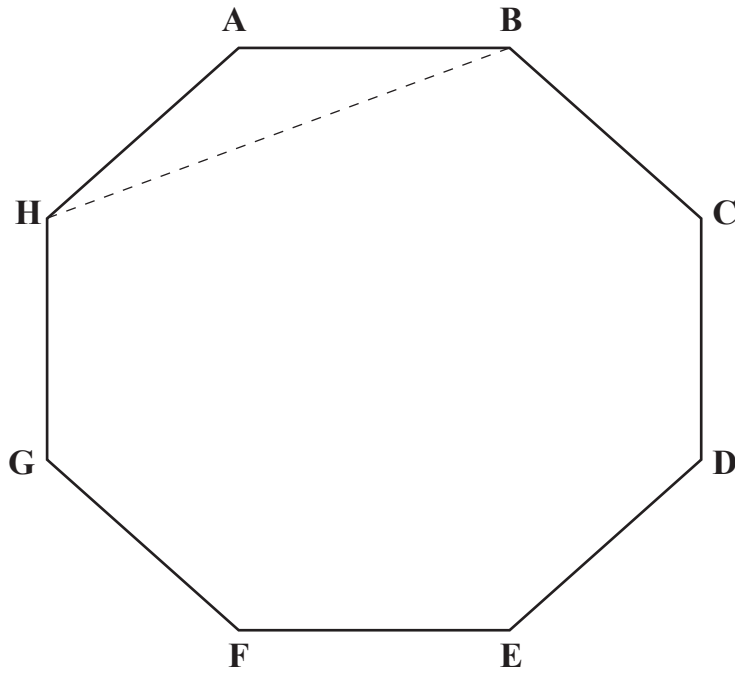


diagram not drawn accurately

Answer _____ ° [3]

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| Question Number | Marks |
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| 2 | |
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| Total Marks | |
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Examiner Number

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