

Please check the examination details below before entering your candidate information

Candidate surname		Other names	
Centre Number		Candidate Number	

Pearson Edexcel International GCSE (9–1)

Wednesday 4 June 2025

Morning (Time: 2 hours)

Paper reference **4WM2F/01R**

Mathematics A (Modular)

UNIT 2F

Foundation Tier



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

Total Marks

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.
- Without sufficient working, correct answers may be awarded no marks.
- Answer the questions in the spaces provided
– *there may be more space than you need.*
- **Calculators may be used.**
- You must **NOT** write anything on the formulae page.
- Anything you write on the formulae page will gain NO credit.

Information

- The total mark for this unit is 100.
- 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.
- Check your answers if you have time at the end.

Turn over ►

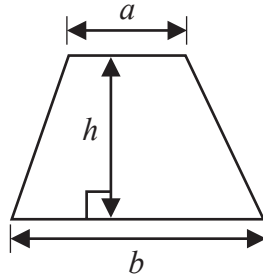
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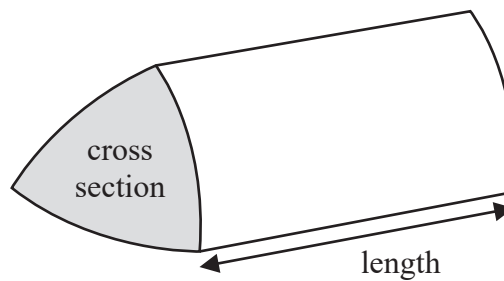



Pearson

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

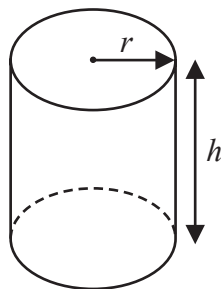


Volume of prism = area of cross section $\times$ length



Volume of cylinder = $\pi r^2 h$

Curved surface area of cylinder = $2\pi r h$

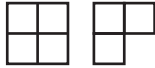
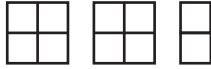


Answer ALL TWENTY FIVE questions.

Write your answers in the spaces provided.

You must write down all the stages in your working.

- 1 Passengers were asked to name their favourite activity during a train journey. The pictogram gives some information about the results.

sleeping	
reading	
watching films	
playing games	
working	



represents 12 passengers

- (a) How many of these passengers said sleeping?

(1)

More passengers said working than watching films.

- (b) How many more?

(1)

15 passengers said playing games.

- (c) Show this information on the pictogram.

(1)

On the train, 6 passengers played board games and 9 passengers played computer games.

- (d) Write down the ratio of the number of passengers who played board games to the number of passengers who played computer games.
Give your answer in its simplest form.

(2)

(Total for Question 1 is 5 marks)



2 Helena recorded the shoe sizes of seven of her friends.

Here are the results.

2 9 10 6 7 9 4

(a) Write down the mode of the shoe sizes.

.....
(1)

(b) Work out the median shoe size.

.....
(2)

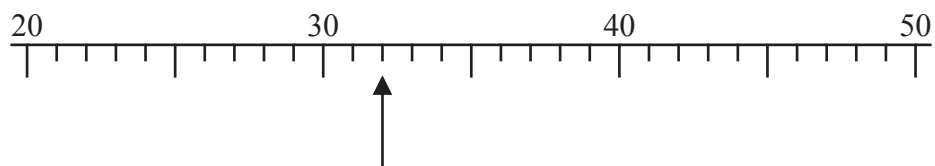
(c) Find the range of the shoe sizes.

.....
(1)

(Total for Question 2 is 4 marks)



3 Here is a scale.



(a) Write down the number marked with an arrow.

.....
(1)

Here is another scale.

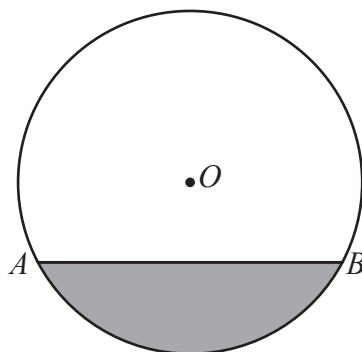


(b) On this scale, mark with an arrow (↑) the number 4.6

(1)

(Total for Question 3 is 2 marks)

- 4 A and B are points on a circle with centre O



- (a) Write down the mathematical name for

(i) the line AB

.....
(1)

(ii) the shaded region

.....
(1)

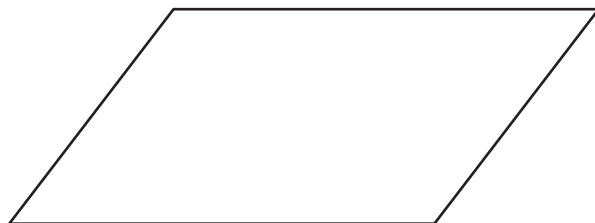
Here is a rectangle.



- (b) On the rectangle, draw the lines of symmetry.

(1)

Here is a parallelogram.



- (c) Write down the order of rotational symmetry of the parallelogram.

.....
(1)

(Total for Question 4 is 4 marks)



5 Here are the first five terms of an arithmetic sequence.

5 9 13 17 21

(a) Write down the next term of the sequence.

.....
(1)

(b) Explain how you found your answer in part (a)

.....
(1)

(c) Find the 10th term of the sequence.

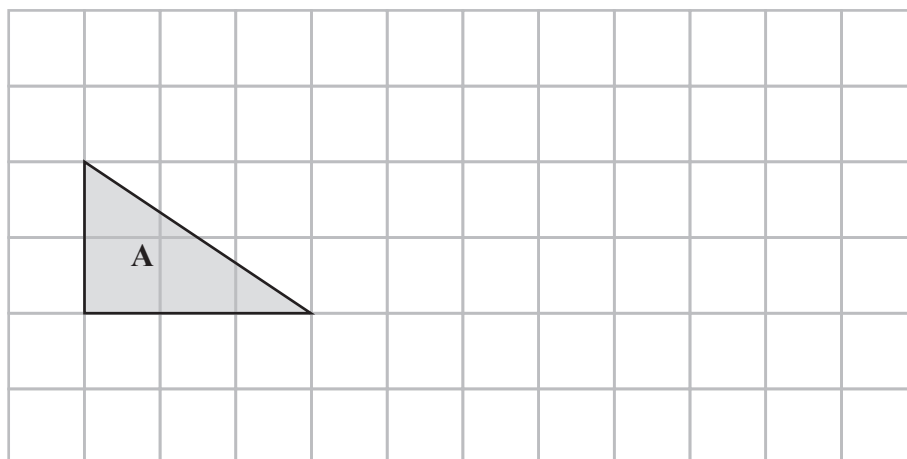
.....
(1)

(d) Explain why 50 cannot be a term of the sequence.

.....
.....
(1)

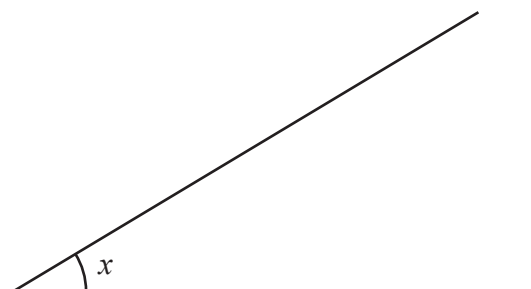
(Total for Question 5 is 4 marks)

6



- (a) On the grid, draw a triangle that is congruent to triangle A

(1)



- (b) Measure the size of the angle marked x

(1)

- (c) Draw a line of length 65 millimetres.
Start your line at the cross.

×

(1)

(Total for Question 6 is 3 marks)

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7 (a) Simplify $5d \times e$

.....
(1)

(b) Simplify $6 \times m \times 3 \times k$

.....
(1)

Here are the first five terms of an arithmetic sequence.

10 20 30 40 50

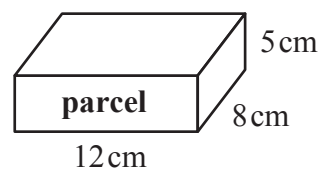
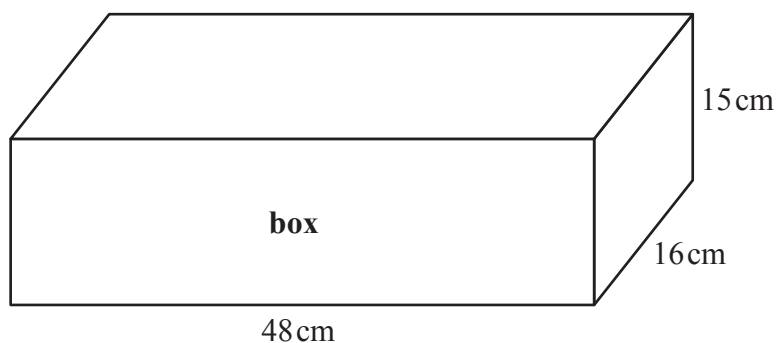
(c) Find an expression, in terms of n , for the n th term of this sequence.

.....
(1)

(Total for Question 7 is 3 marks)

- 8 A box is to be filled with parcels.

Diagram **NOT**
accurately drawn



The box is a cuboid that measures 48 cm by 16 cm by 15 cm
Each parcel is a cuboid that measures 12 cm by 8 cm by 5 cm

Work out the number of parcels needed to completely fill the box.

(Total for Question 8 is 3 marks)



- 9 Mark is going to book a room in a hotel for 7 nights.

A room in the hotel costs the same amount for each night.

Mark knows that the room costs 150 euros for 2 nights.

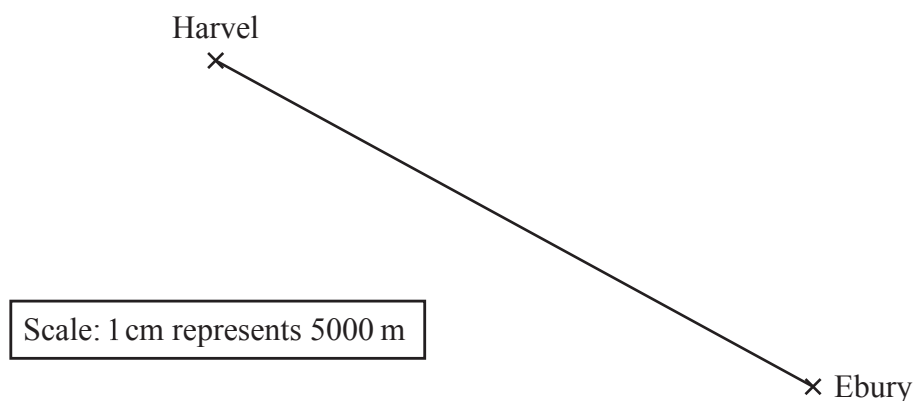
The hotel also charges an additional tax of 5 euros for each night.

Work out the total cost of the room and the tax for 7 nights.

..... euros

(Total for Question 9 is 3 marks)

10 The scale drawing shows the positions of two towns, Harvel and Ebury.



(a) Work out the real distance, in kilometres, between Harvel and Ebury.

..... kilometres
(3)

On Saturday, Luisa cycles directly from Harvel to Ebury.

Luisa leaves Harvel at 12 50

She arrives at Ebury at 17 15

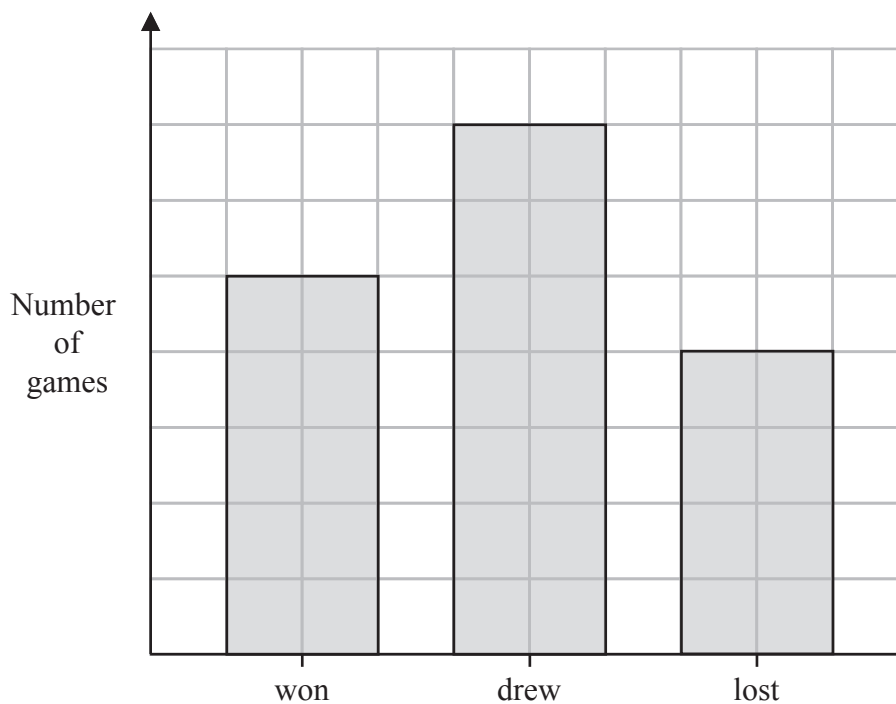
(b) Work out the time Luisa takes to cycle directly from Harvel to Ebury.

..... hours minutes
(2)

(Total for Question 10 is 5 marks)



11 The bar chart gives information about the results of the games played by a school team.



The team gained

3 points for each game it won

1 point for each game it drew

0 points for each game it lost

The team drew 14 games.

Work out the total number of points the team gained.

(Total for Question 11 is 3 marks)

12 Here is a list of ingredients needed to make 6 biscuits.

Biscuits
Makes 6 biscuits
60 g sugar
75 g butter
1 egg
90 g flour
65 g chocolate

Asha makes some of these biscuits.
She uses 450 g of flour.

(a) How many biscuits does Asha make?

.....
(2)

Julie makes 84 of these biscuits.

(b) What weight of butter does Julie use?

..... g
(2)

Asha and Julie pay a total of 624 rupees for the ingredients.
The ratio of the amount Asha pays to the amount Julie pays is 3 : 5

(c) How much does Julie pay?

..... rupees
(2)

(Total for Question 12 is 6 marks)



13 $y = 5d - 8e$

- (a) Work out the value of y when $d = 3$ and $e = -4$

$$y = \dots\dots\dots (2)$$

- (b) Make r the subject of the formula $c = 8r + h$

$$\dots\dots\dots (2)$$

Dan has n bags of seeds and p boxes of seeds.

Each bag contains 12 seeds.

Each box contains 25 seeds.

Dan has a total of T seeds.

- (c) Write a formula for T in terms of n and p

$$\dots\dots\dots (3)$$

(Total for Question 13 is 7 marks)



- 14 A green light blinks every 6 minutes.
A blue light blinks every 8 minutes.

The green light and the blue light blink together at 3 45 pm

Find the time when they next blink together.

..... pm

(Total for Question 14 is 3 marks)



15 (a) Find 35% of 500

.....
(2)

Layan sells cars.

The table gives information about the bonus he receives each time he sells a car.

Value of car	Bonus
Up to \$40 000	6% of the value of the car
More than \$40 000	6% of the first \$40 000 and 8% of the remaining value of the car

Layan sold a car for \$65 000

(b) Work out the bonus he received for selling this car.

\$.....
(3)

(Total for Question 15 is 5 marks)

16 The table shows information about the weights, in kilograms, of 50 dogs.

Weight (w kg)	Frequency
$4 < w \leq 8$	5
$8 < w \leq 12$	17
$12 < w \leq 16$	15
$16 < w \leq 20$	9
$20 < w \leq 24$	4

(a) Write down the modal class.

..... kg
(1)

(b) Work out an estimate for the mean weight of the 50 dogs.

..... kg
(4)

(Total for Question 16 is 5 marks)



- 17 Write 1400 as a product of powers of its prime factors.
Show your working clearly.

.....
(Total for Question 17 is 3 marks)

- 18 Solve the simultaneous equations

$$3x + 2y = 10$$

$$3x - 4y = 16$$

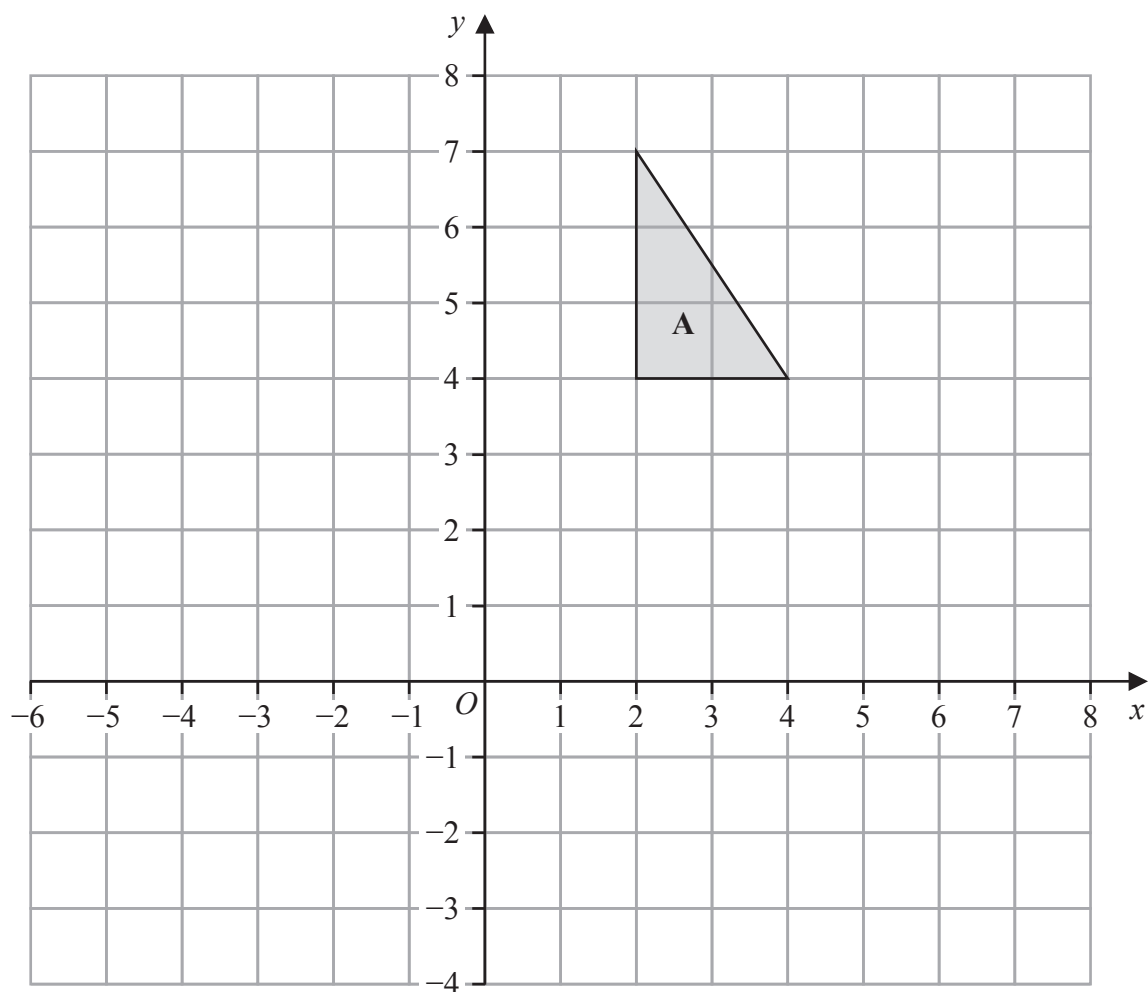
Show clear algebraic working.

$$x = \dots\dots\dots$$

$$y = \dots\dots\dots$$

(Total for Question 18 is 3 marks)



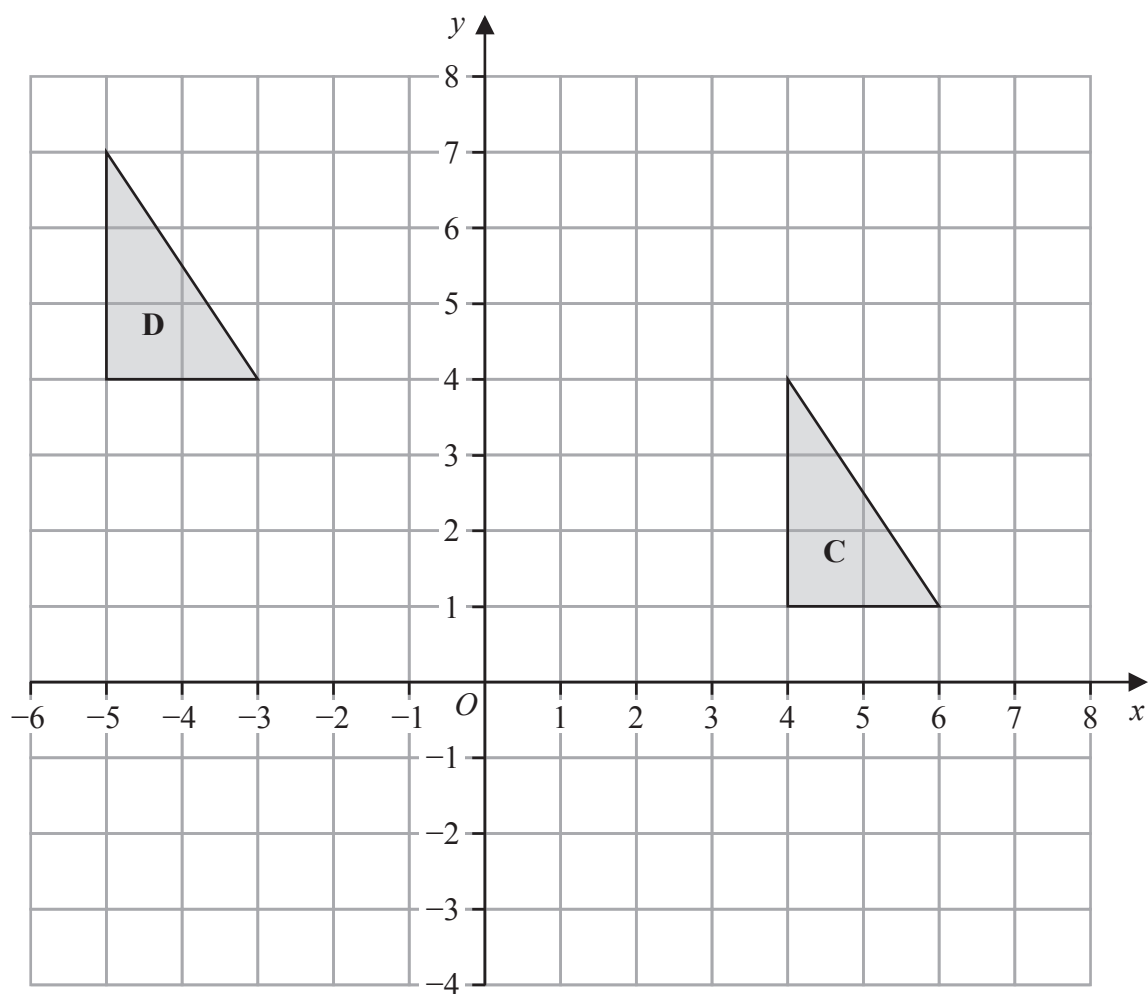


- (a) On the grid above, rotate triangle A 90° anticlockwise about (1, 2)

Label your triangle **B**

(2)





(b) Describe fully the single transformation that maps triangle **C** onto triangle **D**

(2)

(Total for Question 19 is 4 marks)

- 20 Joshua is going to cover a floor with tiles for a customer.
The area of the floor is 45 m^2

Joshua buys one box of tiles for each 1.5 m^2 of floor area.
Each box of tiles costs £64

Joshua also buys 5 bags of tile adhesive.
Each bag of tile adhesive costs £12

Joshua charges the customer £3000

Work out his percentage profit.
Give your answer correct to one decimal place.

.....%

(Total for Question 20 is 5 marks)



21 (a) Write 82 000 000 in standard form.

.....
(1)

(b) Write 5.8×10^{-6} as an ordinary number.

.....
(1)

(c) Write 160×10^{300} in standard form.

.....
(1)

(Total for Question 21 is 3 marks)

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22 The mean of 7 numbers is 60

The mean of 3 of the numbers is 46

Work out the mean of the other 4 numbers.

(Total for Question 22 is 3 marks)



23 In a sale, normal prices are reduced by 15%

The sale price of a dishwasher is 612 Swiss francs.

Work out the normal price of the dishwasher.

..... Swiss francs

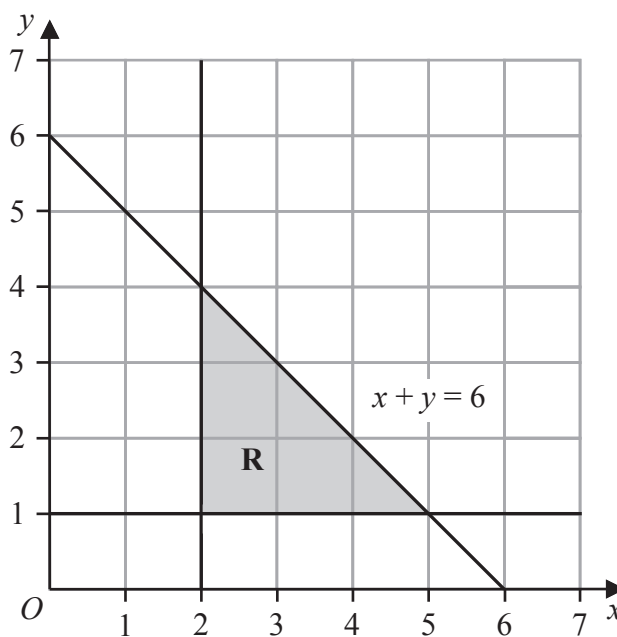
(Total for Question 23 is 3 marks)



- 24 (a) Solve the inequality $3x - 22 > 8x - 40$
Show clear algebraic working.

.....
(3)

The region **R**, shown shaded in the diagram, is bounded by three straight lines.



- (b) Write down the three inequalities that define the region **R**

.....
.....
.....
(3)

(Total for Question 24 is 6 marks)



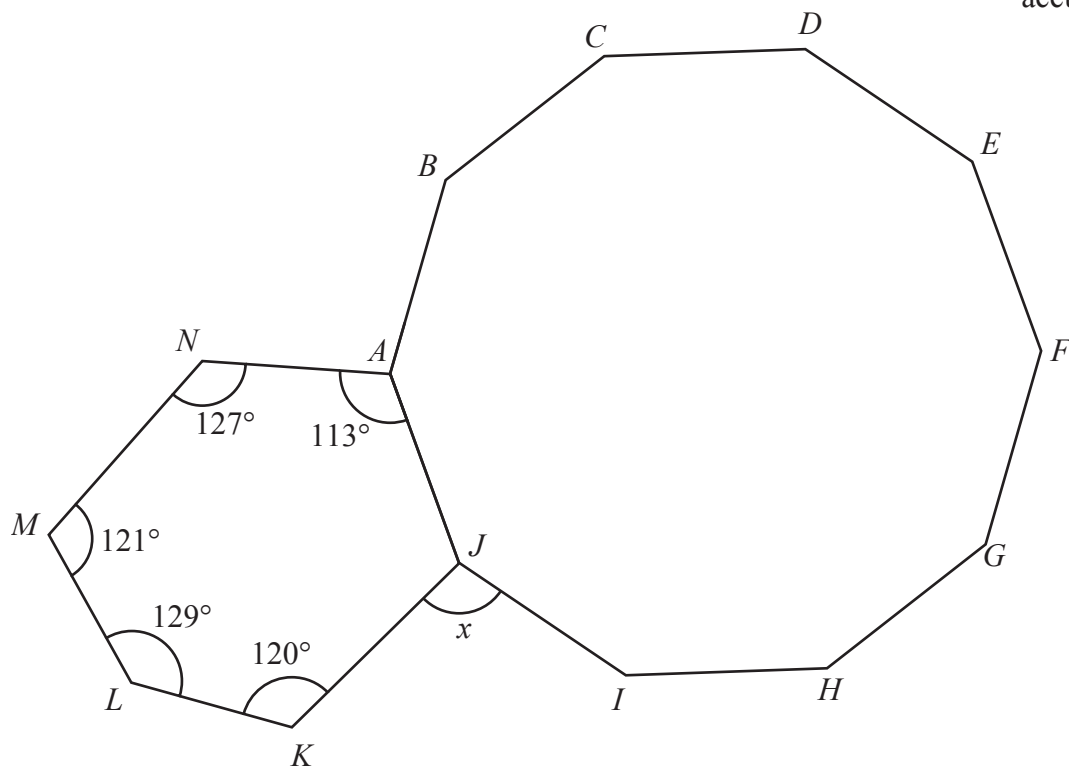
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25 The diagram shows a regular 10-sided polygon $ABCDEFGHIJ$ and a hexagon $AJKLMN$

Diagram **NOT**
accurately drawn



Work out the size of the angle marked x
Show your working clearly.

(Total for Question 25 is 5 marks)

TOTAL FOR UNIT IS 100 MARKS



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