

Cambridge Assessment
International Education

Cambridge IGCSE™

CANDIDATE
NAMECENTRE
NUMBER

--	--	--	--	--

CANDIDATE
NUMBER

--	--	--	--



CAMBRIDGE INTERNATIONAL MATHEMATICS

0607/32

Paper 3 Calculator (Core)

May/June 2025

1 hour 15 minutes

You must answer on the question paper.

You will need: Geometrical instruments

INSTRUCTIONS

- Answer **all** questions.
- Use a black or dark blue pen. You may use an HB pencil for any diagrams or graphs.
- Write your name, centre number and candidate number in the boxes at the top of the page.
- Write your answer to each question in the space provided.
- Do **not** use an erasable pen or correction fluid.
- Do **not** write on any bar codes.
- You should use a graphic display calculator where appropriate.
- You may use tracing paper.
- You must show all necessary working clearly. You will be given marks for correct methods, including sketches, even if your answer is incorrect.
- Give non-exact numerical answers correct to 3 significant figures, or 1 decimal place for angles in degrees, unless a different level of accuracy is specified in the question.
- For π , use either your calculator value or 3.142.

INFORMATION

- The total mark for this paper is 60.
- The number of marks for each question or part question is shown in brackets [].

This document has **12** pages.

List of formulas

Area, A , of triangle, base b , height h .

$$A = \frac{1}{2}bh$$

Area, A , of circle of radius r .

$$A = \pi r^2$$

Circumference, C , of circle of radius r .

$$C = 2\pi r$$

Curved surface area, A , of cylinder of radius r , height h .

$$A = 2\pi rh$$

Curved surface area, A , of cone of radius r , sloping edge l .

$$A = \pi rl$$

Surface area, A , of sphere of radius r .

$$A = 4\pi r^2$$

Volume, V , of prism, cross-sectional area A , length l .

$$V = Al$$

Volume, V , of pyramid, base area A , height h .

$$V = \frac{1}{3}Ah$$

Volume, V , of cylinder of radius r , height h .

$$V = \pi r^2 h$$

Volume, V , of cone of radius r , height h .

$$V = \frac{1}{3}\pi r^2 h$$

Volume, V , of sphere of radius r .

$$V = \frac{4}{3}\pi r^3$$



- 1 Jamal buys 5 packets of lentils.
He pays with \$10.
He receives \$2.75 change.

Work out the cost of one packet of lentils.

\$ [2]

- 2 Work out $\frac{7.3}{1.2 + 3.5}$.
Give your answer correct to 4 decimal places.

..... [2]

- 3 A factory makes 578 880 cookies every 24 hours.
(a) Show that 402 cookies are made every minute.

[2]

- (b) The cookies are sold in packets of 6.

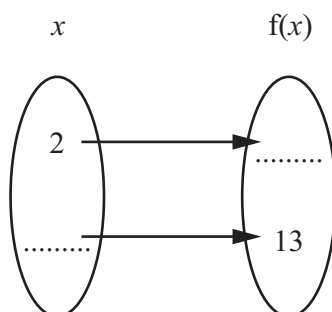
Work out how many packets of 6 are made every minute.

..... [1]



4 $f(x) = 5x - 7$

Complete the mapping diagram.



[2]

5 These are 6 number cards.



Use 4 of these cards to complete the equivalent fractions.

$$\frac{\boxed{}}{\boxed{}} = \frac{\boxed{}}{\boxed{12}} = \frac{\boxed{12}}{\boxed{}}$$

[2]

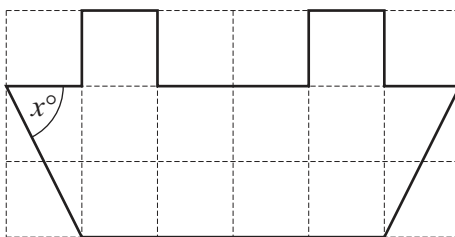
6 Solve.

$$7x - 13.2 = 2x + 0.8$$

$$x = \dots\dots\dots [2]$$



- 7 A shape is drawn on a 1 cm^2 grid.



- (a) Work out the area of the shape.

..... cm^2 [1]

- (b) Use trigonometry to find the value of x .

$x =$ [2]

8 $A = \frac{1}{2}(x + 2y)$

- (a) Find the value of A when $x = 7.23$ and $y = 2.16$.

$A =$ [2]

- (b) Find the value of x when $A = 9.47$ and $y = 1.89$.

$x =$ [2]





9 Pirupak walks 220 metres in 2.25 minutes.

(a) Show that 2.25 minutes = 135 seconds.

[1]

(b) Work out Pirupak's speed in metres per second.

..... m/s [1]

10 The cost of a laptop is \$3200.
In a sale, the cost of this laptop is reduced to \$2816.

Work out the percentage reduction.

..... % [2]

DO NOT WRITE IN THIS MARGIN

DO NOT WRITE IN THIS MARGIN

DO NOT WRITE IN THIS MARGIN

DO NOT WRITE IN THIS MARGIN

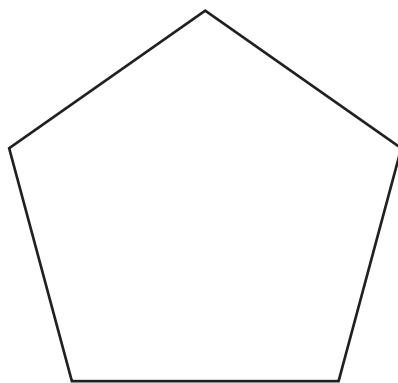
DO NOT WRITE IN THIS MARGIN





7

11



NOT TO
SCALE

The diagram shows a regular 5-sided polygon.

(a) Write down the mathematical name for this polygon.

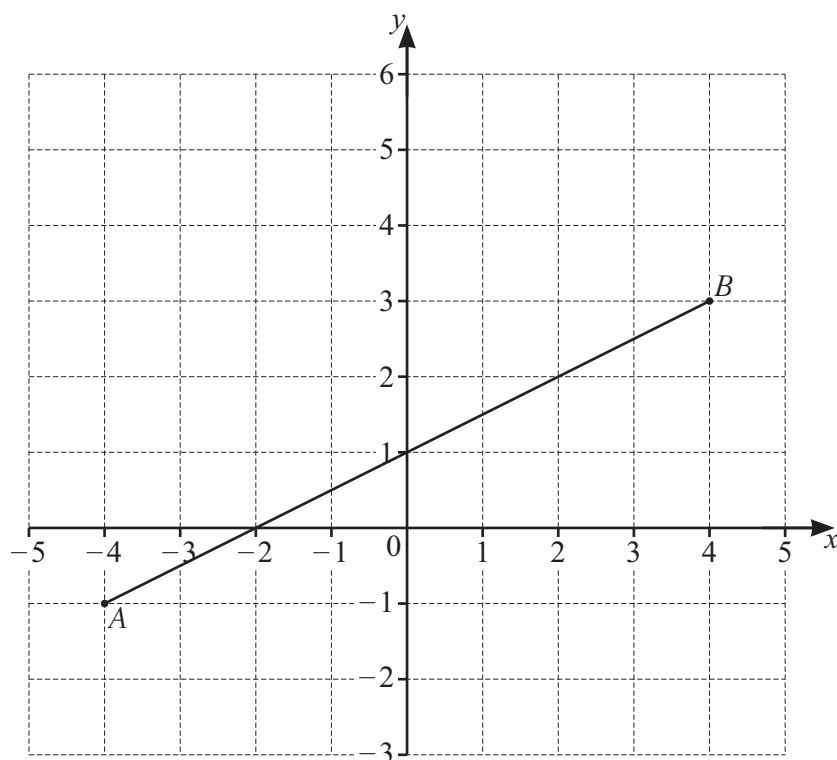
..... [1]

(b) Work out the size of one interior angle of this polygon.

..... [2]



- 12 The diagram shows a straight line joining point A $(-4, -1)$ and point B $(4, 3)$.



- (a) Find the coordinates of the midpoint of AB .

(..... ,) [1]

- (b) Work out the gradient of AB .

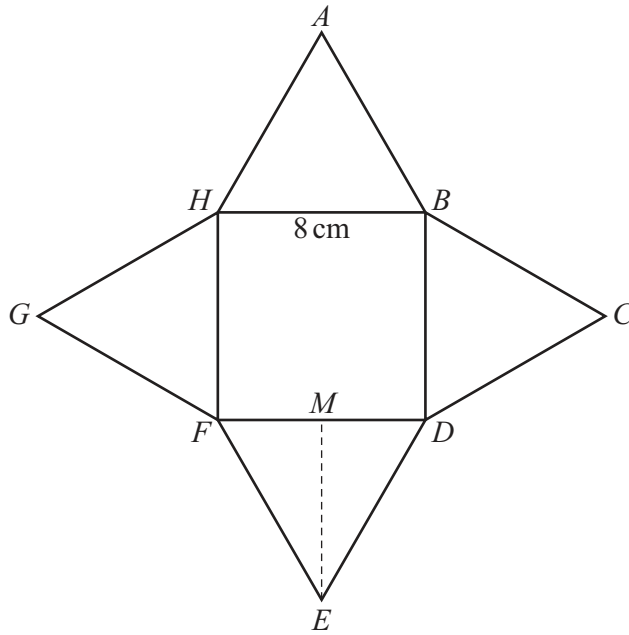
..... [2]

- (c) Find the equation of AB .

..... [2]



13

NOT TO
SCALE

The diagram shows a shape made from a square of side 8 cm and four equilateral triangles.

- (a) Write down the length of DE .

$DE = \dots\dots\dots$ cm [1]

- (b) Write down the size of angle FDE .

Angle $FDE = \dots\dots\dots$ [1]

- (c) M is the midpoint of FD .

Show that $EM = 6.93$ correct to 3 significant figures.

[3]

- (d) Work out the total area of the shape.

$\dots\dots\dots$ cm² [3]

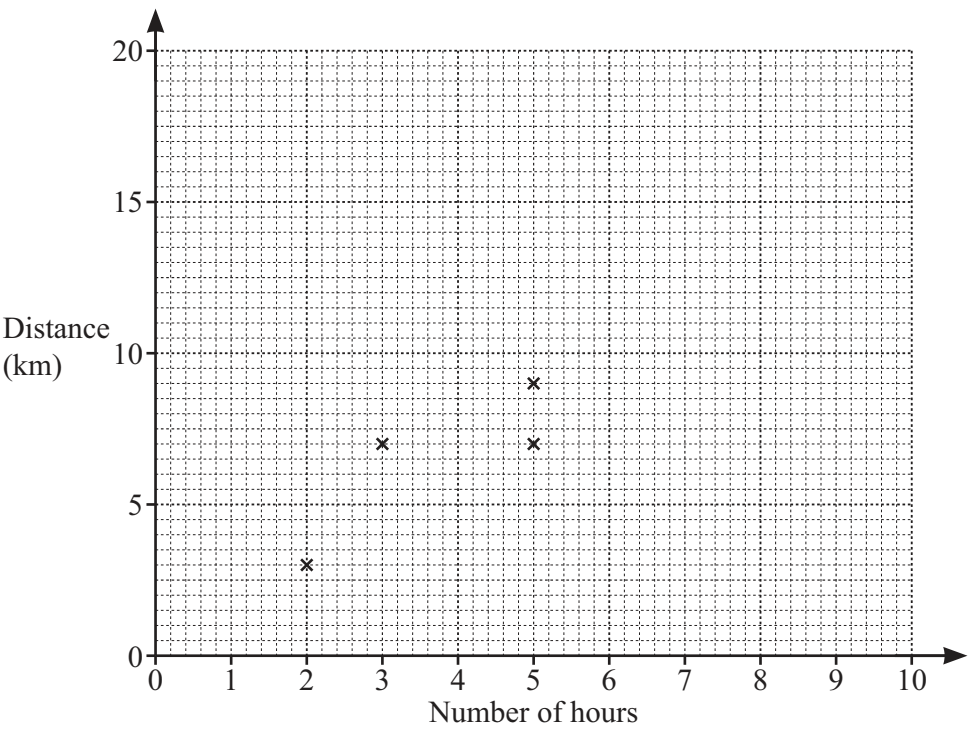




- 14 8 people train for a charity run.
The number of hours that they train and the distance they run is shown in the table.

Number of hours	2	3	5	5	6	7	8	10
Distance (km)	3	7	7	9	12	13	15	18

- (a) Complete the scatter diagram.
The first four points have been plotted for you.



- (b) Write down the type of correlation shown in the scatter diagram.

..... [1]

- (c) Work out

- (i) the mean number of hours

..... h [1]

- (ii) the mean distance.

..... km [1]

- (d) On the diagram, draw a line of best fit.

[2]



- 15 Shaila invests \$2000 at a rate of 1.3% per year compound interest.

Calculate the amount of interest she receives at the end of 3 years.

\$ [3]

- 16 Rohan goes for a holiday to Europe.

He changes \$2000 into euros (€) at an exchange rate of \$1 = €0.9759 .

- (a) Show that Rohan receives €1951.80 .

[1]

- (b) In Europe, Rohan spends €1500.

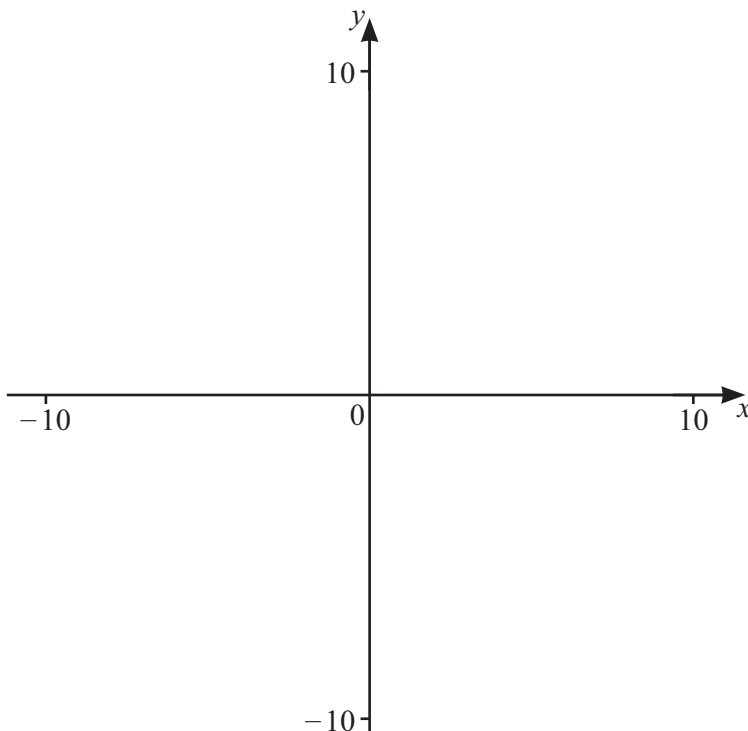
He changes the remaining euros back to dollars (\$) at the same exchange rate.

Calculate the amount Rohan receives.

\$ [2]

Question 17 is printed on the next page.





(a) On the diagram, sketch the graph of $y = \frac{3x+6}{x-2}$ for values of x between -10 and 10 . [3]

(b) Find the coordinates of the point where the graph crosses the x -axis.

(..... ,) [1]

(c) On the diagram, sketch the graph of $y = x$ for values of x between -10 and 10 . [1]

(d) Find the coordinates of the points of intersection of $y = \frac{3x+6}{x-2}$ and $y = x$.

(..... ,) and (..... ,) [2]

Permission to reproduce items where third-party owned material protected by copyright is included has been sought and cleared where possible. Every reasonable effort has been made by the publisher (UCLES) to trace copyright holders, but if any items requiring clearance have unwittingly been included, the publisher will be pleased to make amends at the earliest possible opportunity.

To avoid the issue of disclosure of answer-related information to candidates, all copyright acknowledgements are reproduced online in the Cambridge Assessment International Education Copyright Acknowledgements Booklet. This is produced for each series of examinations and is freely available to download at www.cambridgeinternational.org after the live examination series.

Cambridge Assessment International Education is part of Cambridge Assessment. Cambridge Assessment is the brand name of the University of Cambridge Local Examinations Syndicate (UCLES), which is a department of the University of Cambridge.

