

**Cambridge IGCSE™**CANDIDATE
NAMECENTRE
NUMBER

--	--	--	--	--

CANDIDATE
NUMBER

--	--	--	--

MATHEMATICS**0580/12**

Paper 1 Non-calculator (Core)

February/March 2026**1 hour 30 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. Do **not** use correction fluid or tape.
- Do **not** write on any bar codes.
- Calculators must not be used in this paper.
- You may use tracing paper.
- You must show all necessary working clearly.

INFORMATION

- The total mark for this paper is 80.
- The number of marks for each question or part question is shown in brackets [].

This document has **16** pages. Any blank pages are indicated.

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 .

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

PapaCambridge



Calculators must **not** be used in this paper.

- 1 (a) Subtract 9 from 1321.

..... [1]

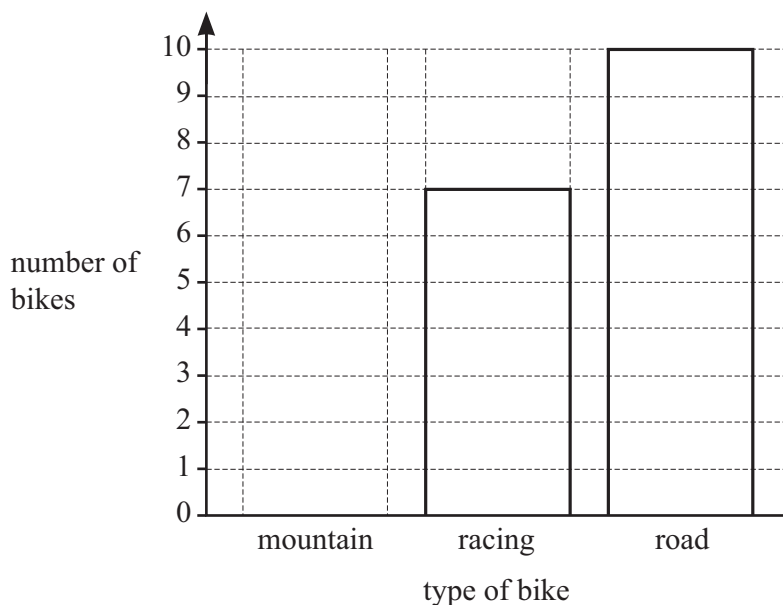
- (b) Divide 814 by 2.

..... [1]

- (c) Write down the multiple of 6 that is nearest to 20.

..... [1]

- 2 25 people own a bike.
Flo asks each of these 25 people what type of bike they own.
The bar chart shows some of these results.



- (a) Complete the bar chart for the mountain bikes. [2]

- (b) How many more people own a road bike than own a racing bike?

..... [1]



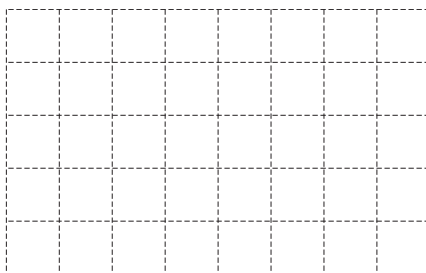
3 (a) Write 0.47 as a percentage.

..... % [1]

(b) Write $\frac{9}{100}$ as a decimal.

..... [1]

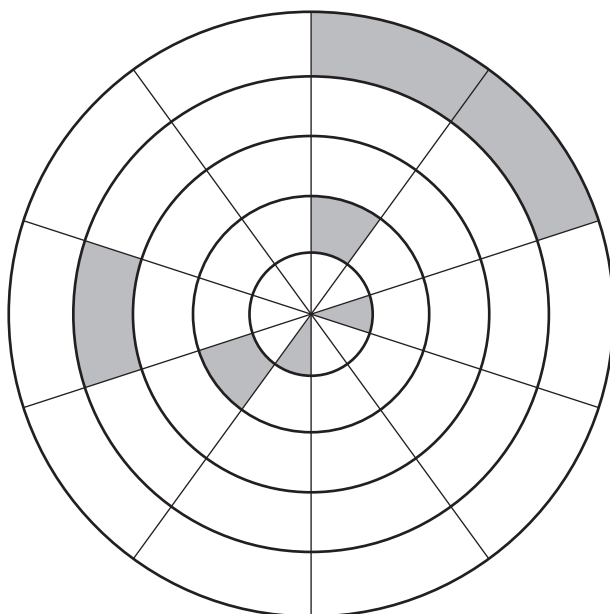
4 (a)



Shade $\frac{3}{10}$ of the squares on the grid.

[1]

(b)



7 of the regions are shaded.

Shade 3 more regions so that $\frac{1}{5}$ of the total area is shaded.

[1]



- 5 (a) These are the first four terms of a sequence.

6000 600 60 6

Write down the term-to-term rule for this sequence.

..... [1]

- (b) These are the first four terms of a different sequence.

27 21 15 9

Find the next two terms in the sequence.

....., [2]

- 6 An isosceles triangle has a side length 4 cm and a side length 6 cm.
There are two possible triangles that can be drawn that are **not** congruent to each other.

Construct these two triangles.

One 4 cm side has been drawn for each of the triangles.

[4]

- 7 Krish has $6x + 4$ marbles.
Jo has $9 - x$ marbles.

- (a) Write down an expression for the total number of marbles that Krish and Jo have.
Give your answer in its simplest form.

..... [2]

- (b) Krish has more marbles than Jo.

Write down an expression for how many more marbles Krish has than Jo.
Give your answer in its simplest form.

..... [2]

- 8 Write down the two prime numbers that are greater than 20 but less than 30.

....., [2]

- 9 (a) Work out the difference between 5^2 and 2^3 .

..... [2]

- (b) Write down the reciprocal of 4.

..... [1]

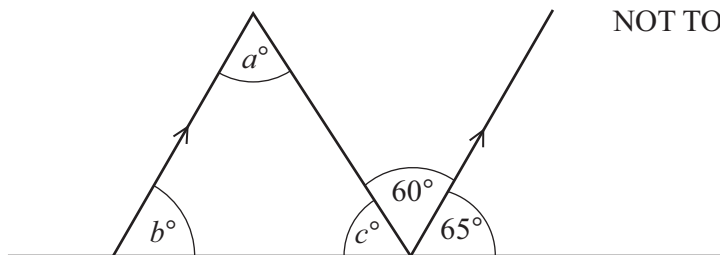
- (c) Write down an irrational number that is between 4 and 5.

..... [1]





10



NOT TO SCALE

Work out the values of a , b and c .

$a =$

$b =$

$c =$

[3]

11 Put **one** pair of brackets into each calculation to make it correct.

(a) $6 \times 5 - 3 + 5 = 42$ [1]

(b) $4 - 80 + 20 \div 10 = -6$ [1]

12 Write 9×27 as a power of 3.

..... [2]

13 Work out $\sqrt{0.0025}$.

..... [1]



- 14 A school records the number of students who are late on each of 12 days.

17	1	23	14	18	8
8	12	10	5	22	19

Complete the stem-and-leaf diagram.

0	
1	
2	

key : 1 | 7 represents 17 students

[2]

- 15 The probability that Jai wins a game is 0.7 .

(a) Find the probability that he does not win a game.

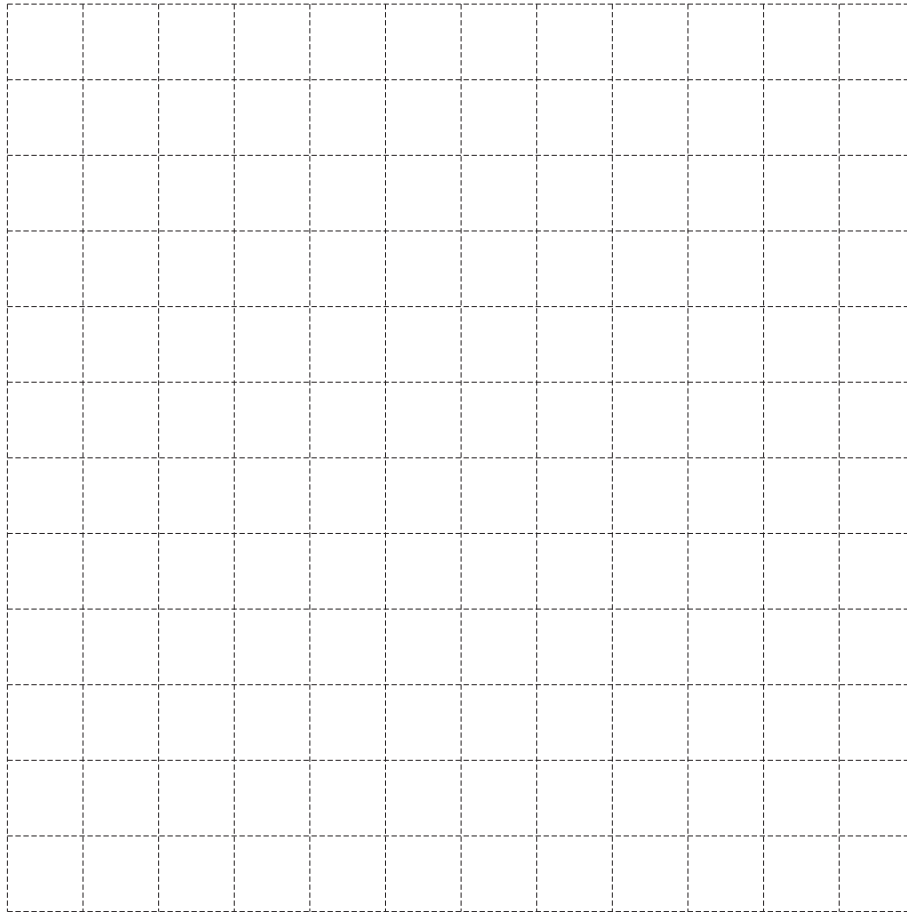
..... [1]

(b) Jai plays 50 games.

Work out the number of games he is expected to win.

..... [1]





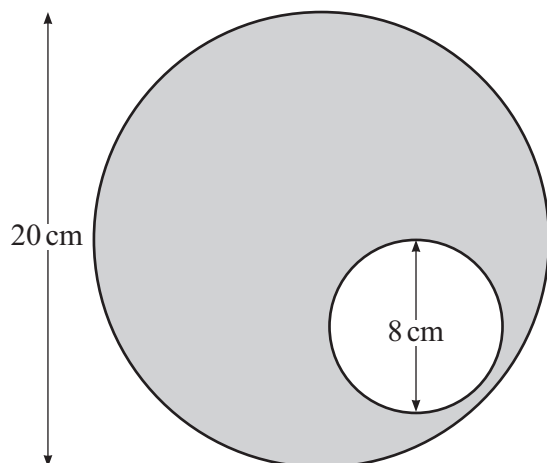
A cube has volume 8 cm^3 .

On the 1 cm^2 grid, draw a net for this cube.

[3]



17 The diagram shows two circles.



NOT TO SCALE

The small circle has diameter 8 cm.
The large circle has diameter 20 cm.

Work out the shaded area.
Give your answer in terms of π .

PapaCambridge

..... cm^2 [3]

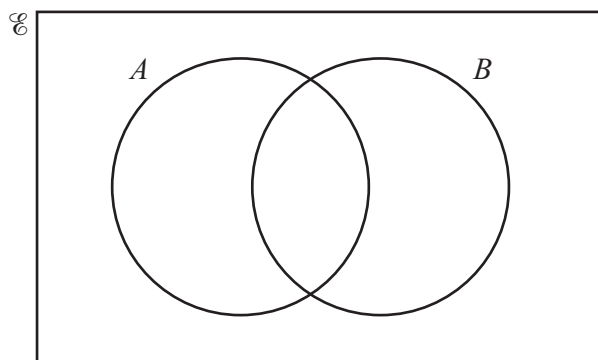
18 Factorise.

$$9x^3 - 6x$$

..... [2]



- 19 $\mathcal{C} = \{1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12\}$
 $A = \{\text{multiples of } 3\}$
 $B = \{\text{multiples of } 4\}$



(a) Complete the Venn diagram. [2]

(b) Write down $n(A \cap B)$.

..... [1]

- 20 Solve the simultaneous equations.

$$-5x - 7y = 1$$

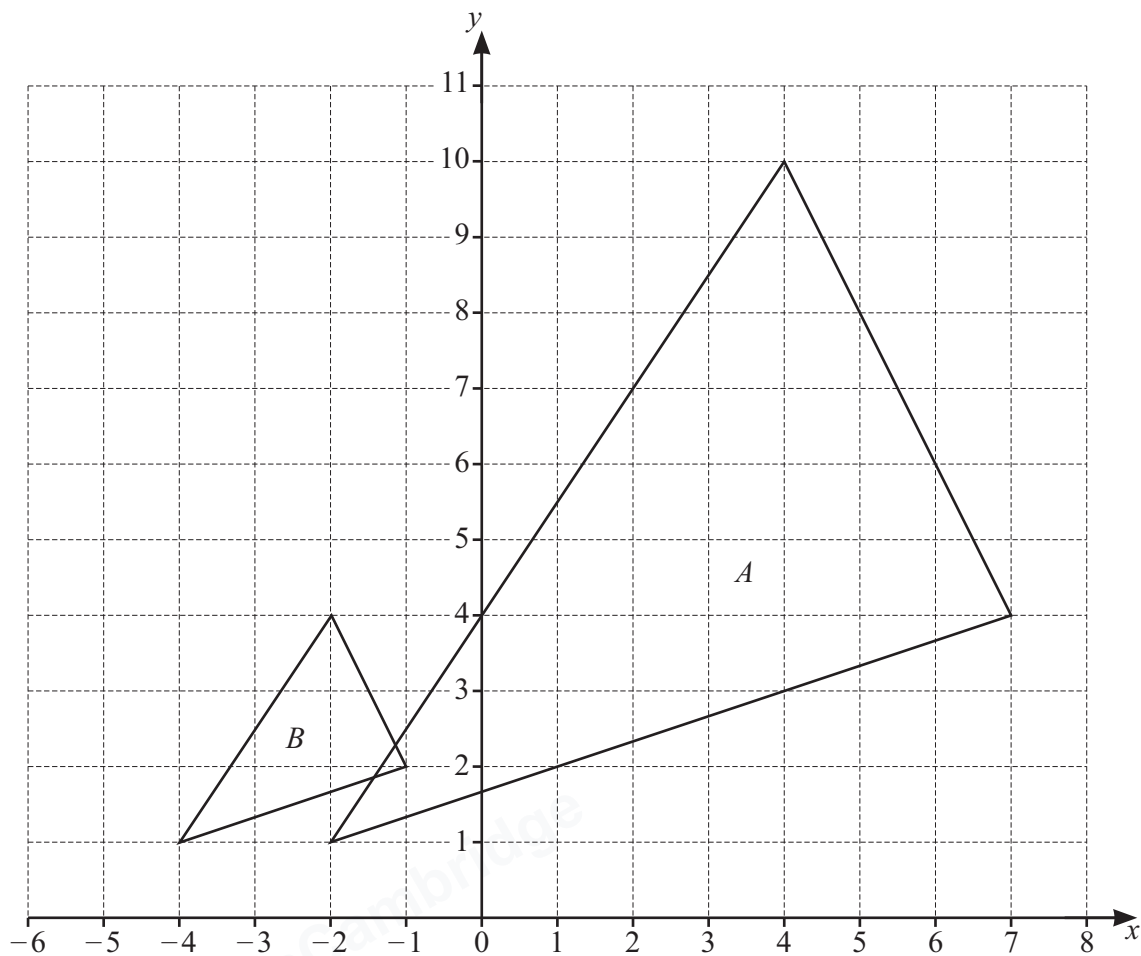
$$6x + 8y = -2$$

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

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

[4]

- 21 The diagram shows two triangles, A and B , on a 1 cm^2 grid.



- (a) Describe fully the **single** transformation that maps triangle A onto triangle B .

.....
 [3]

- (b) On the grid, draw the image of triangle B after a rotation 180° , centre $(-2, 4)$. [2]

- (c) Triangle A is reflected in the line $x = 7$.

Work out the coordinates of the vertices of triangle A , after this reflection.

(..... ,), (..... ,), (..... ,) [3]

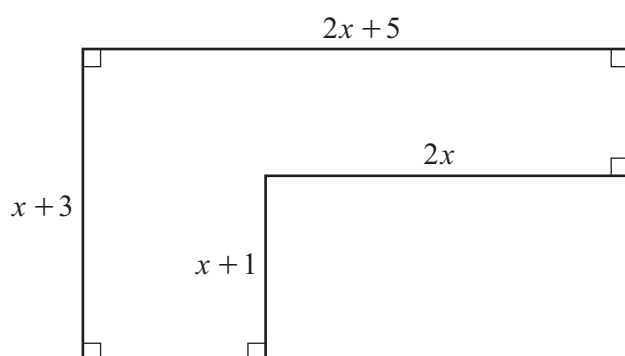


22 (a) Expand the brackets and simplify.

$$(2x + 5)(x + 3)$$

..... [2]

(b)



NOT TO SCALE

Find an expression for the area of this shape.
Give your answer in its simplest form.

..... [3]

- 23 The height, h metres, of a tree is 37.4 m, correct to the nearest 10 centimetres.

Complete this statement about the value of h .

$$\dots\dots\dots \leq h < \dots\dots\dots [2]$$

- 24 Complete these statements.
Give your answers in standard form.

(a)

$$2.5 \text{ km is the same as } \dots\dots\dots \text{ cm.} [2]$$

(b)

$$30 \text{ cm}^3 \text{ is the same as } \dots\dots\dots \text{ litres.} [2]$$

- 25 By writing each number in the calculation correct to 1 significant figure, work out an estimate for the value of

$$\frac{0.43 \times 22.8}{13.7}.$$

$$\dots\dots\dots [2]$$



26 Work out $3\frac{3}{5} \times 2\frac{2}{9}$.

Give your answer in its simplest form.

..... [3]

- 27 (a) A teacher asks a student to make x the subject of the formula $y = \frac{x}{5} + 2$.
Their working is shown in the box below, but it is **not** correct.

$y = \frac{x}{5} + 2$	line A
$5y = x + 2$	line B
$5y - 2 = x$	line C
$x = 5y - 2$	line D

Complete this statement.

Line is **not** correct because

..... [1]

- (b) Make p the subject of the formula.

$$A = pt^2$$

$p =$ [1]





Cambridge

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 (Cambridge University Press & Assessment) 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 our 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 International Education is the name of our awarding body and a part of Cambridge University Press & Assessment, which is a department of the University of Cambridge.

