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CAMBRIDGE INTERNATIONAL MATHEMATICS

0607/23

Paper 2 Non-calculator (Extended)

May/June 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. You will be given marks for correct methods even if your answer is incorrect.

INFORMATION

- The total mark for this paper is 75.
- 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 .

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

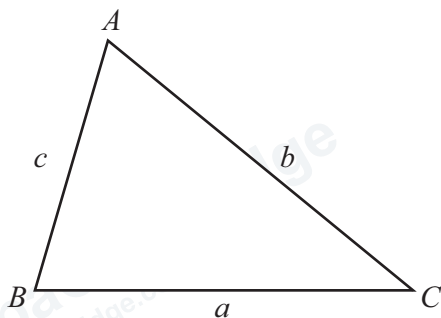
Volume, V , of sphere of radius r .

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

For the equation $ax^2 + bx + c = 0$, where $a \neq 0$,

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

For the triangle shown,



$$\frac{a}{\sin A} = \frac{b}{\sin B} = \frac{c}{\sin C}$$

$$a^2 = b^2 + c^2 - 2bc \cos A$$

$$\text{Area} = \frac{1}{2}ab \sin C$$



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

1 Work out.

(a) $4 - 3 \times 2 + 1$

..... [1]

(b) $(0.11)^2$

..... [1]

(c) $\sqrt{2\frac{1}{4}}$

..... [2]

2 All sides of a parallelogram are the same length.
The angles of the parallelogram are **not** all equal.

Write down the mathematical name of this parallelogram.

..... [1]

3 Work out.

$$\frac{2}{5} + \frac{3}{10}$$

..... [2]

4 Simplify.

$$9x - 2y + 3x + y$$

..... [2]

5 This is a list of numbers.

22 18 19 24 16 21 16 12

(a) Write down the mode.

..... [1]

(b) Find the median.

..... [2]

6 On the number line, show the inequality $-3 \leq x < 2$.



[2]

7 Paula drives home after work.

(a) One day Paula starts the journey at 1738 and finishes the journey at 1923.

Find the time this journey takes.
Give your answer in hours and minutes.

..... h min [1]

(b) On another day Paula's journey takes 1 hour 30 minutes.
The distance of this journey is 96 km.

Work out the average speed for this journey.

..... km/h [2]



- 8 (a) Find the sum of the interior angles of an octagon.

..... [2]

- (b) The interior angle of a regular polygon is a° .

Find, in terms of a , the number of sides of the polygon.

..... [2]

- 9 Factorise.

(a) $2x^3y^4 - 3x^5y^3$

..... [2]

(b) $4x^2 - 5x - 6$

..... [3]

- 10 Leon sells a chair for \$18.
Leon's profit is 20% of the cost of making the chair.

Find the cost of making the chair.

\$ [2]

- 11 A bag contains 10 discs.
7 discs are red and 3 discs are blue.

A disc is picked at random from the bag and not replaced.
A second disc is then picked at random from the bag.

Find the probability that both discs are red.

..... [2]

- 12 (a) Simplify.

$$\sqrt{75} - \sqrt{27}$$

..... [2]

- (b) Rationalise the denominator and simplify.

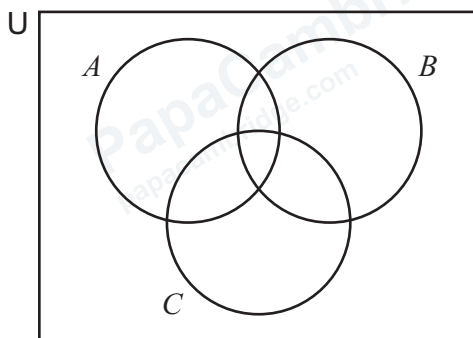
$$\frac{21}{4 - \sqrt{2}}$$

..... [3]



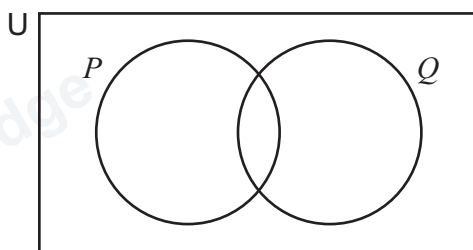
13 Shade the given regions in each of these Venn diagrams.

(a) $(A \cup B \cup C)'$



[1]

(b) $P' \cap Q'$



[1]

14 y varies directly as the square root of $(x - 1)$.
 $y = 15$ when $x = 26$.

Find y in terms of x .

$y = \dots\dots\dots$ [2]



15

$$f(x) = 3x + 1$$

$$g(x) = 2^x$$

$$h(x) = \log x$$

(a) Work out.

(i) $f(-1)$

..... [1]

(ii) $g(5)$

..... [1]

(iii) $h(1)$

..... [1]

(b) Solve.

(i) $f(x) = 13$

$x =$ [2]

(ii) $g(x) = 0.25$

$x =$ [2]

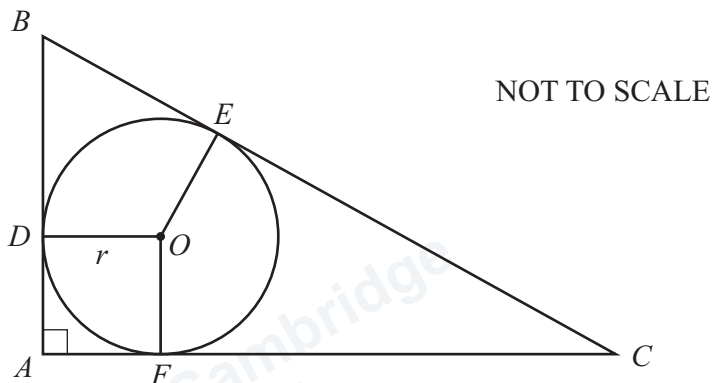
(c) Solve.

$$gf(x) = 4h(100)$$

$x =$ [4]



- 16 The diagram shows a circle drawn inside a right-angled triangle.



ABC is a right-angled triangle with $AB = 6$ cm, $AC = 8$ cm and $BC = 10$ cm.

The circle has centre O and radius r cm.

The circle touches the triangle at the points D , E and F .

- (a) Give a geometrical reason to explain why $BD = BE$.

..... [1]

- (b) Find the area of the circle.
Give your answer in terms of π .

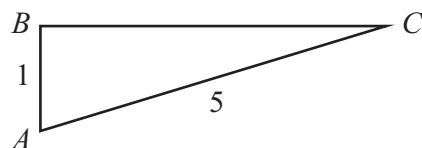
..... [4]

- (c) Triangle PQR is similar to triangle ABC .
 $PQ = 3$ cm, $PR = 4$ cm and $RQ = 5$ cm.

Find the area of the circle that touches the sides of triangle PQR .
Give your answer in terms of π .

..... [2]

- 17 (a) ABC is a triangle with angle $ABC = 90^\circ$.



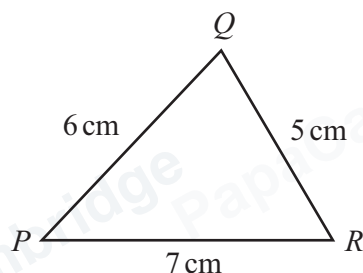
NOT TO SCALE

It is given that $\cos A = \frac{1}{5}$.

Show that $\sin A = \frac{\sqrt{24}}{5}$.

[2]

- (b) The diagram shows triangle PQR .



NOT TO SCALE

- (i) Show that $\cos Q = \frac{1}{5}$.

[2]

- (ii) Use the results in 17(a) and 17(b)(i) to find the exact value of the area of triangle PQR .
Give your answer in the form $k\sqrt{k}$, where k is an integer.

..... cm^2 [3]

- 18 Make x the subject of the formula.

$$A(2-x) = A - \frac{3(2x+1)}{B}$$

$x =$ [4]

Question 19 is on the back page.

19 Point A has coordinates $(-2, 7)$ and point B has coordinates $(2, -1)$.

- (a) Find the length of the line AB .
Give your answer in the form $\sqrt{p}$.

..... [3]

- (b) Find the equation of the line perpendicular to AB that passes through B .
Give your answer in the form $y = mx + c$.

$y =$ [4]

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