Cambridge Assessment International Education

Cambridge IGCSE™

CANDIDATE NAME									
CENTRE NUMBER						CANDIDATE NUMBER				

MATHEMATICS **0580/11**

Paper 1 (Core) **October/November 2024**

1 hour

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 calculator where appropriate.
- You may use tracing paper.
- You must show all necessary working clearly.
- 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 56.
- The number of marks for each question or part question is shown in brackets [ ].

© UCLES 2024

1 Jacob is 10 years 8 months old.
Amy is 15 months younger than Jacob.

View solution

Find how old Amy is.

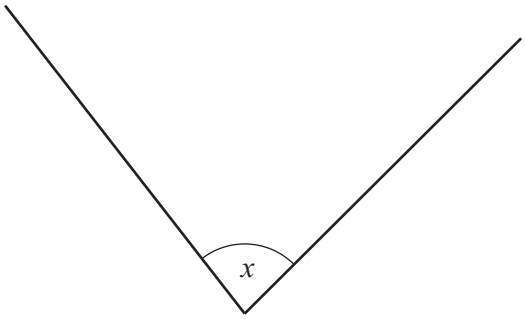
..... years ..... months [1]

2 Change 6.7 kilometres to metres.

View solution

..... m [1]

3



(a) Measure angle x.

View solution

Angle x = ... [1]

(b) Write down the mathematical name for this type of angle.

View solution

..... [1]

4 A concert starts at 19 50 and finishes 2 hours 42 minutes later.

View solution

Work out the time the concert finishes.

..... [1]

© UCLES 2024

5 Use one of these symbols $<$, $>$ or $=$ to make each statement true.

View solution

$\frac{2}{7}$ 0.2861

$\frac{99}{900}$ 11%

1^3 ..... 4^0

[2]

6 The stem-and-leaf diagram shows the number of cars sold each day by a company.

1	0 3 4 5 6 7
2	1 2 2 4 7 7 7
3	0 0 1 2 2 5 6 8
4	0 1 4 6
5	1 2 4

Key: 3 | 2 represents 32

(a) Find the range.

View solution

..... [1]

(b) Find the mode.

View solution

..... [1]

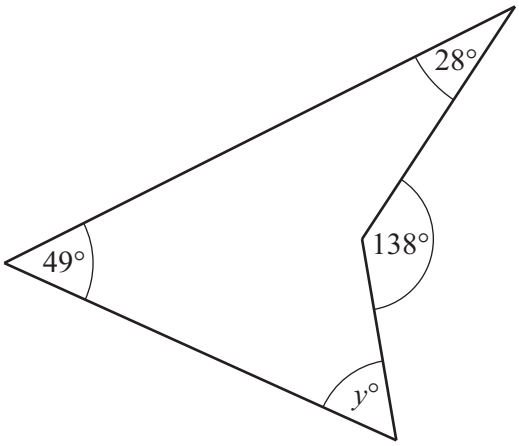
7 Find the reciprocal of $1\frac{1}{4}$.

View solution

..... [1]

© UCLES 2024

8



NOT TO SCALE

View solution

The diagram shows a quadrilateral.

Find the value of y.

$y =$ ..... [2]

View solution

9 Edith invests \$3000 in a savings account.
The account pays simple interest at a rate of 2.6% per year.

Calculate the total interest earned during the 3 years.

\$ ..... [2]

© UCLES 2024

10 **(a)** These are the first four terms of a sequence.

View solution

10 16 22 28

Write down the next term in the sequence.

..... [1]

(b) The term to term rule for another sequence is multiply by 3 and subtract 1.
The fourth term in the sequence is 68.

View solution

Find the third term in the sequence.

..... [2]

11 The circumference of a wheel is 198.55 cm.

View solution

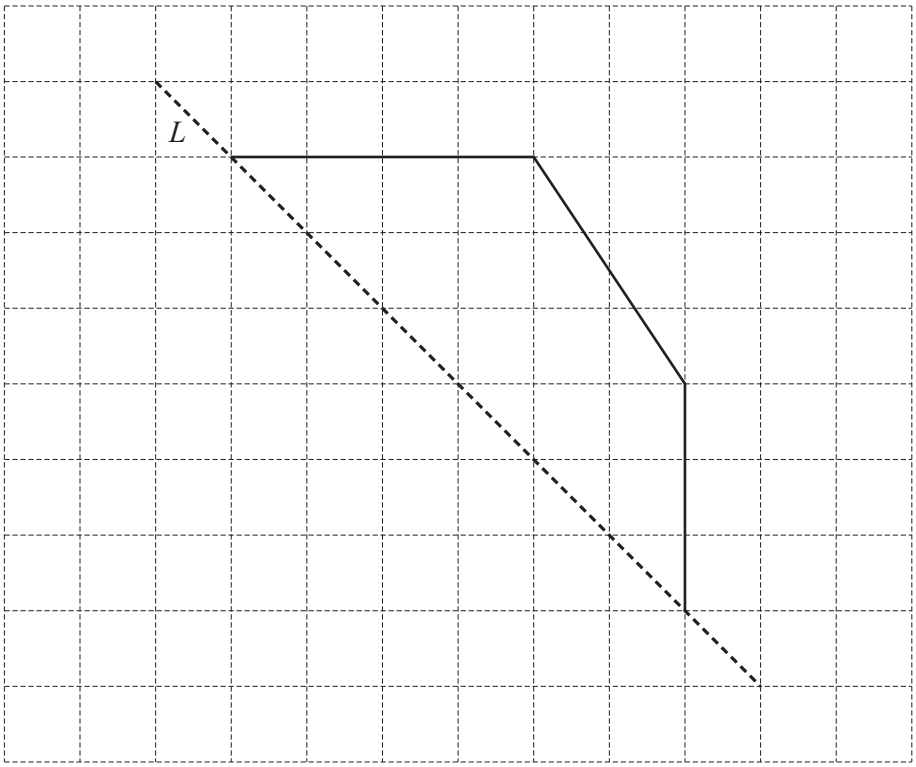
Calculate the diameter of the wheel.
Give your answer in millimetres.

..... mm [3]

12 The grid shows half of a shape which has a line of symmetry, L.

View solution

Complete the shape.



[2]

13 **(a)** Find the value of $6c+7d$ when $c=3$ and $d=-4$.

View solution

..... [2]

(b) Solve.

$$6x+8=11x+4$$

View solution

$x=$ ..... [2]

14 Write 34 as a percentage of 80.

View solution

..... % [1]

View solution

15 A bus stops 25 times on a journey.
The table shows the number of people who get on the bus at each stop.

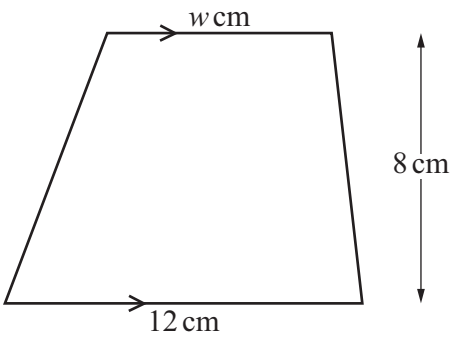
Number of people	Frequency
0	1
1	6
2	7
3	4
4	5
5	2

Calculate the mean.

..... [3]

16

View solution



NOT TO SCALE

The diagram shows a trapezium with parallel sides of length 12 cm and w cm.
The height of the trapezium is 8 cm.
The area of the trapezium is 78 cm^2.

Find the value of w.

$w =$ ..... [2]

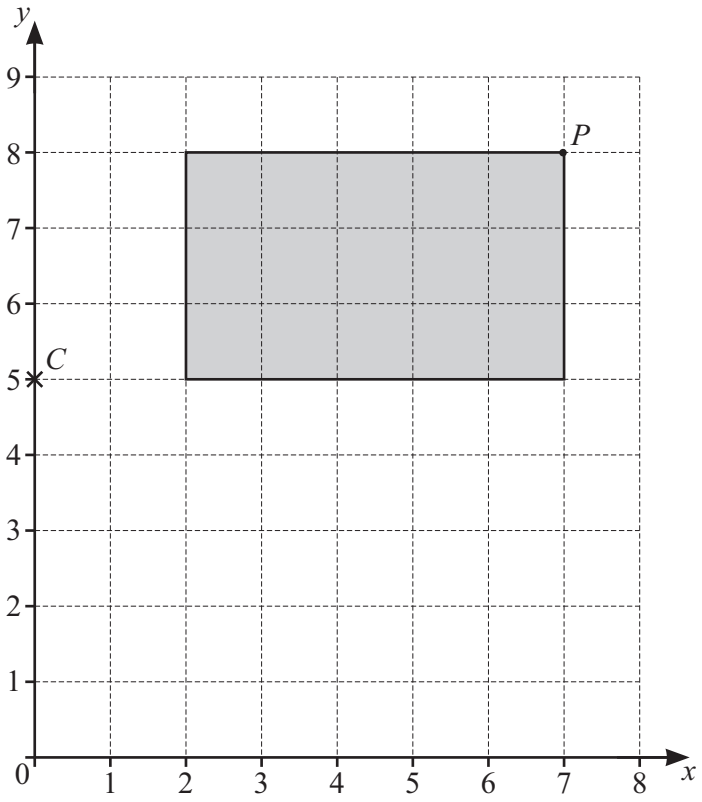
View solution

17 A distance, d metres, measures 34.6 m, correct to the nearest 0.1 m.

Complete this statement about the value of d.

..... $\leqslant d <$ ..... [2]

18 The diagram shows a rectangle and two points, P and C, on a 1 cm^2 grid.



(a) Write down the coordinates of point C.

View solution

(..... , ...) [1]

(b) The rectangle is enlarged by scale factor 2 with centre of enlargement point C.

Find the coordinates of the image of point P.

View solution

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

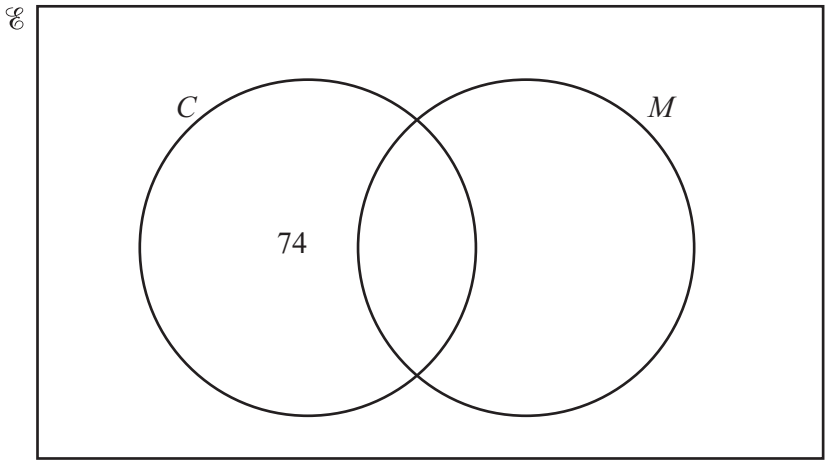
(c) Find the area of the enlarged rectangle.

View solution

..... cm^2 [1]

19 Jo asks some people if they own a car (C) and if they own a motorbike (M).

86 people own a car.
39 people own a motorbike.
7 people do not own a car and do not own a motorbike.



(a) Complete the Venn diagram.

View solution

[2]

(b) Find the total number of people that Jo asks.

View solution

..... [1]

(c) Write down $n(C \cap M)$.

View solution

..... [1]

20 Josh buys a car for \$7800 and sells it for \$5265.

View solution

Calculate his percentage loss.

..... % [2]

21 **(a)** Factorise.

$28x - 35$

View solution

..... [1]

(b) Make r the subject of the formula $T = \frac{r}{4} - p$.

View solution

$r =$ ..... [2]

View solution

22 Solve the simultaneous equations.
You must show all your working.

$$5x + 6y = 9$$
$$3x - 2y = -17$$

$x =$ .....

$y =$ .....
[3]

Questions 23 and 24 are printed on the next page.

© UCLES 2024

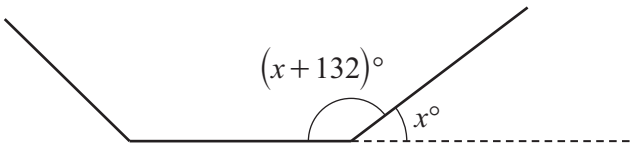
23 **Without using a calculator**, work out $5\frac{1}{3} - 3\frac{4}{7}$.

You must show all your working and give your answer as a mixed number in its simplest form.

View solution

..... [3]

24



NOT TO SCALE

View solution

The diagram shows part of a regular polygon.
The interior angle of the polygon is 132° larger than the exterior angle.

Calculate the number of sides of this polygon.

..... [3]

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.

© UCLES 2024