

# Cambridge Primary Checkpoint

CANDIDATE  
NAME

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CENTRE  
NUMBER

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CANDIDATE  
NUMBER

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## MATHEMATICS

0096/02

## Paper 2

**October 2024**

**45 minutes**

You must answer on the question paper.

You will need:

- Compasses
- Protractor
- Tracing paper (optional)

## 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 show all your working in the booklet.
- You may use a calculator.

## INFORMATION

- The total mark for this paper is 40.
- The number of marks for each question or part question is shown in brackets [ ].

This document has **24** pages. Any blank pages are indicated.

- 1 Round 15.21 to the nearest tenth.

..... [1]

- 2 Draw a line to match each fraction to the correct division.

$$11 \div 4$$

$$\frac{3}{4}$$

$$4 \div 3$$

$$3 \div 4$$

$$1\frac{1}{4}$$

$$5 \div 4$$

$$4 \div 5$$

[1]

- 3 Mike rolls a fair 1 to 6 dice.

Here are two pairs of events.

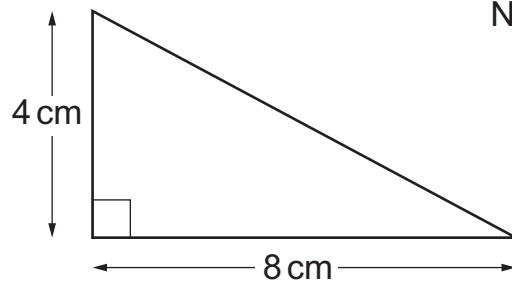
Mike rolls a 3 or Mike rolls an even number

Mike rolls a number less than 5 or Mike rolls a number greater than 5

Draw a ring around the most likely event in each pair.

[1]

- 4 Here is a right-angled triangle.



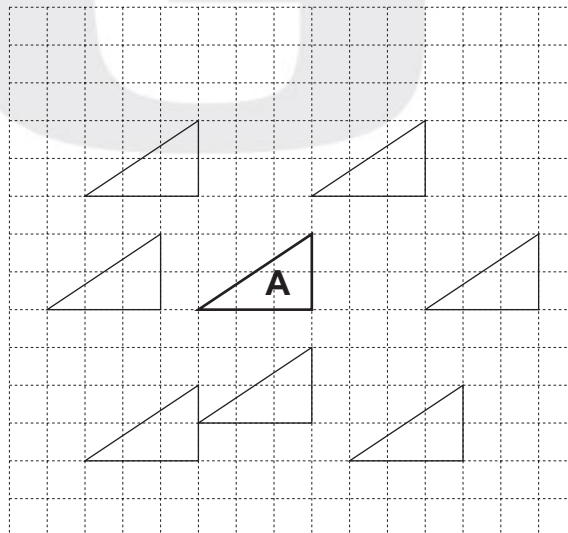
Not drawn to scale

Calculate the area of the triangle.

.....  $\text{cm}^2$  [1]

- 5 Here is a grid of squares.

Triangle A is translated horizontally on the grid.



Draw a ring around **all** the triangles which show possible new positions of triangle A.

[1]

- 6 Anastasia thinks of a number.

The number has

3 tens  
2 ones  
0 tenths  
5 hundredths  
1 thousandth

Write Anastasia's number.

..... [1]

- 7 Here are the heights of four children.

The heights are measured in centimetres.

134      140      142      144

- (a) Calculate the range of the heights.

..... centimetres [1]

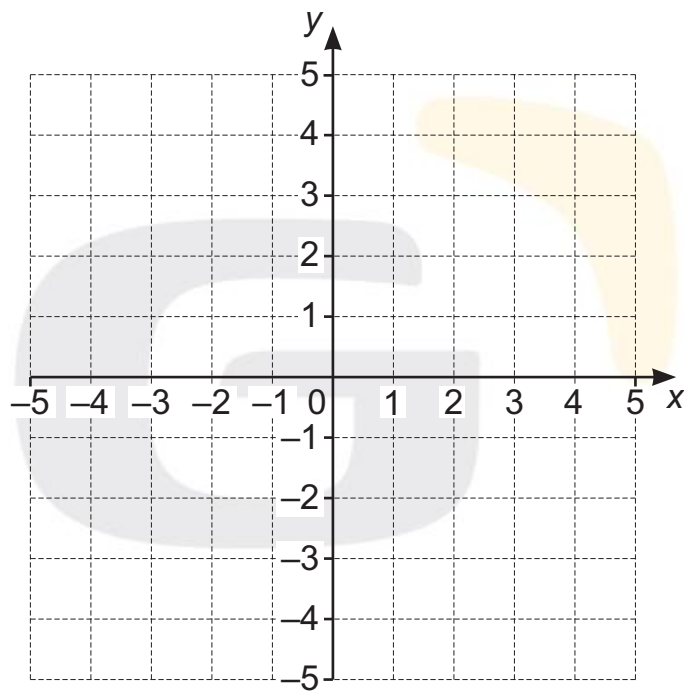
- (b) Calculate the mean height.

..... centimetres [1]

- 8 Write **two** fractions with a total of  $\frac{6}{7}$

..... and ..... [1]

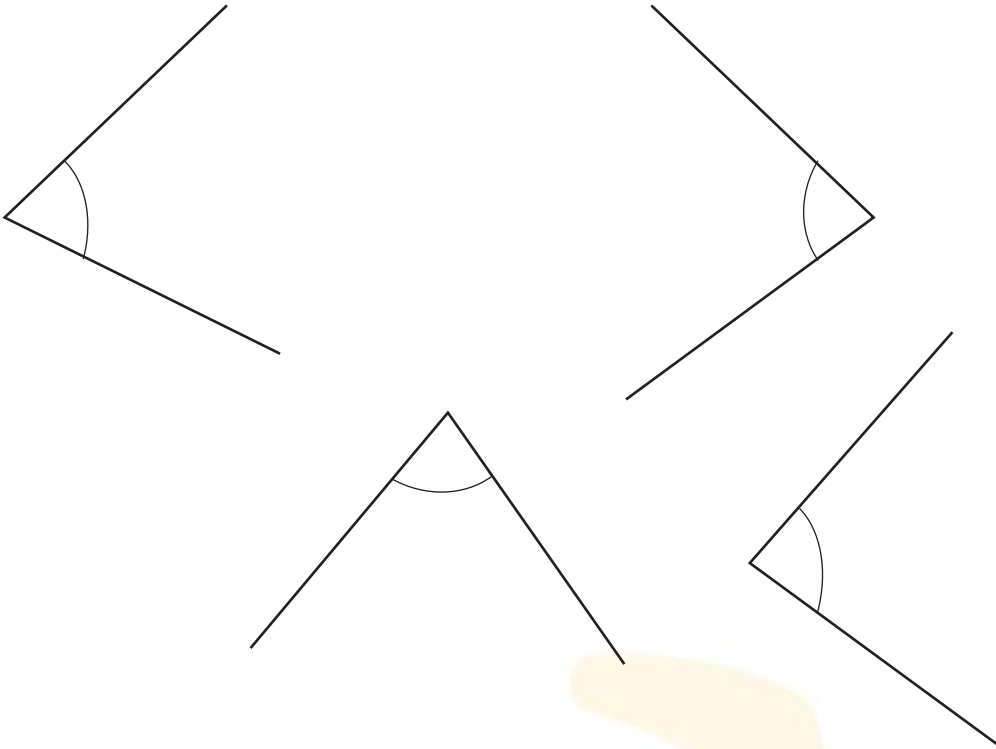
- 9 Here is a coordinate grid.



Plot the point  $(-4, 3)$ .

[1]

**10 (a)** Here are four angles.



Draw a ring around the angle that measures  $75^\circ$ .

[1]

**(b)** Draw an angle that measures  $120^\circ$ .  
Label the angle.

[1]

11 Here are three symbols.

> < =

Write the correct symbol in each box.

You may use each symbol once, more than once or not at all.

$$\frac{3}{5} \quad \square \quad 30\%$$

$$60\% \quad \square \quad 0.07$$

$$0.15 \quad \square \quad \frac{1}{5}$$

[2]

12 Yuri calculates  $6 + 4 \times 2$

Yuri says,



Yuri is **not** correct.  
He has used an incorrect method.

Explain the correct **method**.

.....  
..... [1]

- 13** The temperature in Oslo is  $-4^{\circ}\text{C}$ .  
The temperature in Harbin is  $-14^{\circ}\text{C}$ .

**(a)** Write the difference in temperature between Oslo and Harbin.

.....  $^{\circ}\text{C}$  [1]

- (b)** The temperature in Helsinki is halfway between the temperatures in Oslo and Harbin.

Write the temperature in Helsinki.

.....  $^{\circ}\text{C}$  [1]

- 14** Here is part of a number sequence.

The sequence continues in the same way.

4

3.25

2.5

Write the correct numbers in the boxes to complete the sequence.

[1]

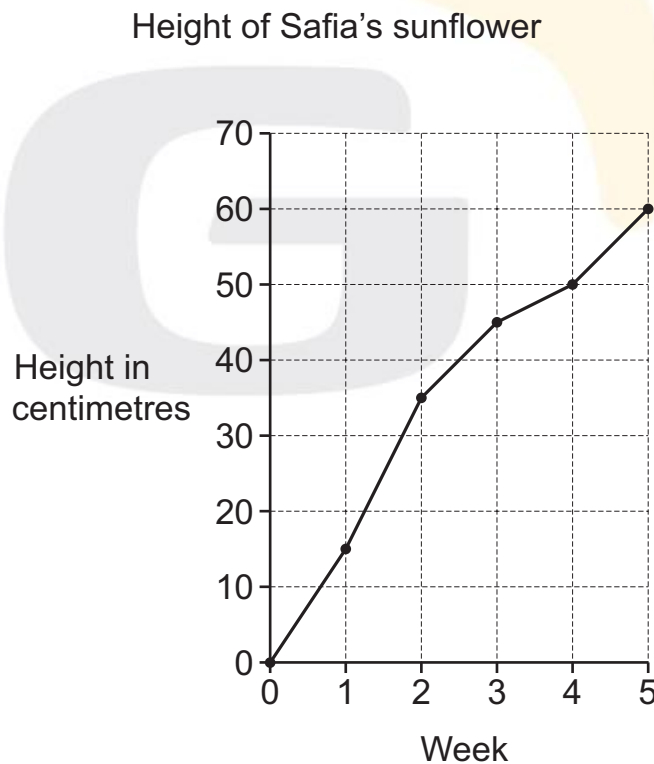
**15** Safia and Hassan each grow a sunflower.

They measure the heights of their sunflowers at the beginning of each week.

**(a)** Here is Safia's data.

Safia's sunflower	
Week	Height in centimetres
0	0
1	15
2	35
3	40
4	50
5	60

Safia plots her data in a line graph.



One of her points is incorrect.

Draw a ring around the incorrect point on her graph.

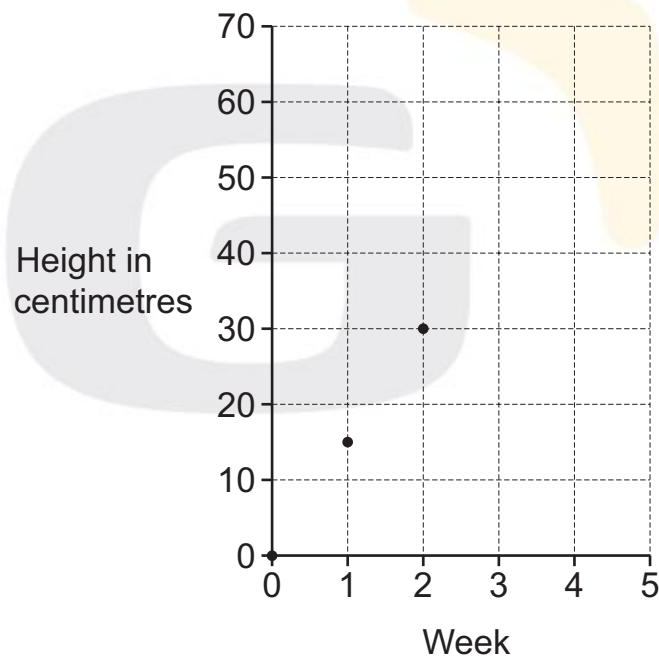
[1]

(b) Here is Hassan's data.

Hassan's sunflower	
Week	Height in centimetres
0	0
1	15
2	30
3	40
4	60
5	70

Complete the line graph for Hassan's sunflower.

Height of Hassan's sunflower



[1]

16 Ahmed says,



Tick (✓) to show if Ahmed is correct.

☐

Yes

☐

No

Explain how you know.

.....

..... [1]

G

**17** Here are some statements about a circle.

	True	False
The circumference is longer than the radius.		
The diameter is longer than the circumference.		
The radius is twice as long as the diameter.		
The diameter is longer than the radius.		
The circumference is a straight line.		

Tick (✓) to show if the statements are true or false.

[2]

**18** Gabriella has yellow sweets and red sweets.

1 in every 4 sweets is yellow.

She has 8 yellow sweets.

Calculate the number of red sweets Gabriella has.

..... [1]

**19 (a)** Write the **largest** number that is a factor of both 36 and 48

.....  
[1]

**(b)** Write the **smallest** number that is a multiple of both 36 and 48

.....  
[1]

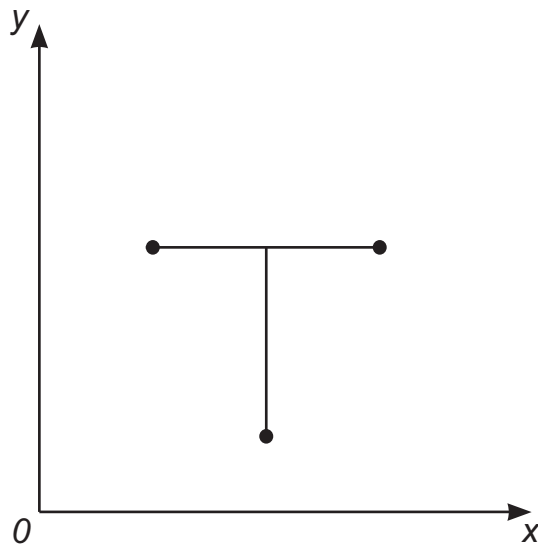
**20** Tick (✓) **all** the expressions that are equivalent to 13.024

13 ones + 24 thousandths	
13 ones + 2 tenths + 4 thousandths	
$10 + 3 + 0.02 + 0.004$	

[1]

**21** Naomi plots three points on a coordinate grid.

She joins the points to make the letter T.



Tick (✓) to show the set of Naomi's coordinates.

(3,7)	(6,2)	(9,7)	
(3,7)	(6,7)	(9,7)	
(3,7)	(6,9)	(9,7)	
(7,3)	(2,6)	(7,9)	
(7,3)	(7,6)	(7,9)	
(7,3)	(9,6)	(7,9)	

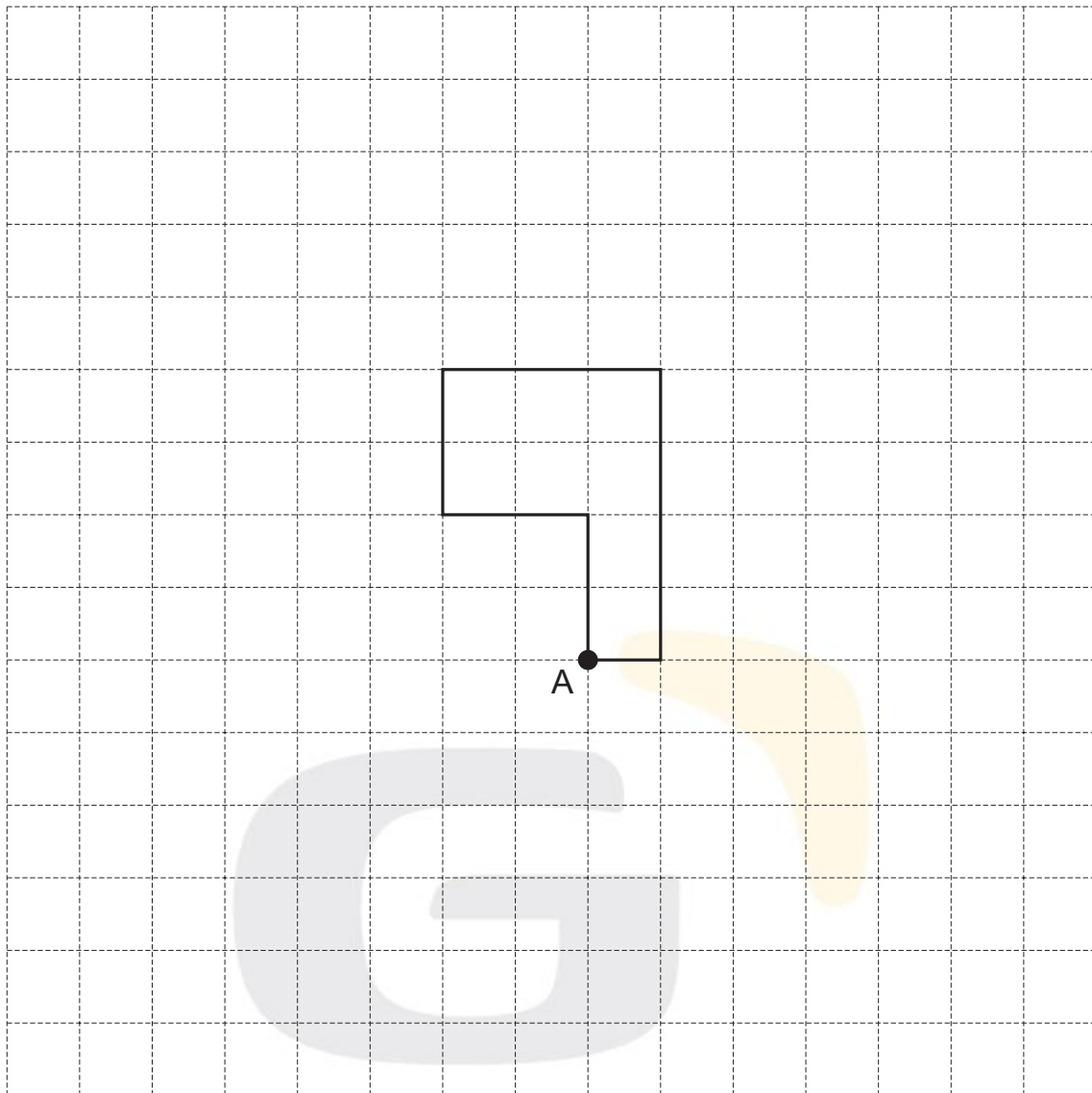
[1]

**22** Draw **accurately** the set of points that are exactly 6 cm from point P.



[1]

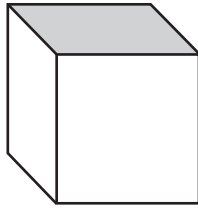
23 Here is a shape drawn on a grid of squares.



Rotate the shape  $90^\circ$  clockwise about the point A.

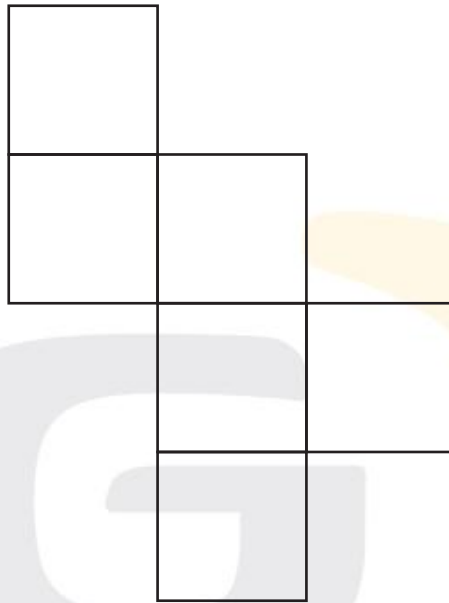
[1]

24 Here is a cube.



The top and bottom faces are grey.  
The other faces are white.

Shade **two** faces to complete the net of this cube.



[1]

**25** Oliver draws four different quadrilaterals.

Here are the names of his quadrilaterals.

kite

rectangle

rhombus

trapezium

Write each name **once** to complete the table.

Description of Oliver's quadrilateral	Name of Oliver's quadrilateral
exactly 4 right angles exactly 2 lines of symmetry	
exactly 1 right angle no parallel sides	
exactly 2 right angles diagonals are not equal lengths	
no right angles diagonals are not equal lengths	

[2]

**26** Carlos chooses two **different** numbers.

Each number has two digits.

Each number rounds to 4 when rounded to the nearest whole number.

Carlos adds his two numbers.

The total rounds to 9 when rounded to the nearest whole number.

Write **two** possible numbers that he chooses.

..... and ..... [1]

**27** Pierre has some \$1 notes **and** some \$2 notes.

The total value of the notes is \$50

**g** represents the number of \$1 notes Pierre has.

**h** represents the number of \$2 notes Pierre has.

**(a)** Write the value of **g** when **h** is 10

..... [1]

**(b)** Write the largest possible value of **h**.

..... [1]

**28** Lily rolls two dice.

She looks at both numbers.

She calculates the difference between the two numbers.

She does this 100 times.

Here are the results.

Differences	Frequency
0	17
1	30
2	22
3	16
4	10
5	5

Write the correct number in each space to complete the sentences.

The probability of a difference of 5 is half the probability of a difference of .....

There is almost a 50% chance of getting a difference of ..... or less.

The probability of a difference of ..... is about the same as the probability of a difference of .....

[2]

**29** Jamila writes the sequence of square numbers.

1            4            9            ...

She makes a **new** sequence by squaring each number in the sequence.

1            16            81            ...

Write the 7th term in her **new** sequence.

..... [1]

**30** Mia has some 10 cent coins and some 50 cent coins in a jar.

She has a total of 20 coins.

For every two 10 cent coins she has three 50 cent coins.

Calculate the total amount of money in the jar.

..... cents [1]

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