



# Cambridge Primary Checkpoint

CANDIDATE  
NAME

CENTRE  
NUMBER

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CANDIDATE  
NUMBER

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## MATHEMATICS

0096/02

Paper 2

April 2023

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 **16** pages. Any blank pages are indicated.

1 Write the numbers in order of size, starting with the smallest.

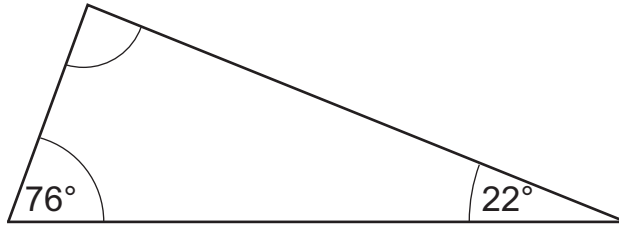
4.36      4.70      4.03      4.63      4.07

..... smallest ..... largest .....

[1]

2 Calculate the size of the missing angle.

Not drawn  
to scale



..... ° [1]

3 Draw a ring around all the fractions that are **less** than 50%.

$$\frac{3}{10}$$

$$\frac{6}{100}$$

$$\frac{7}{10}$$

$$\frac{60}{100}$$

$$\frac{40}{100}$$

[1]

4 Two equilateral triangles are joined to make a quadrilateral.

Write the name of the shape.

..... [1]

5 Here is a table showing the position and the terms of a sequence.

Complete the table.

Position	Term
1	7
2	14
3	21
10	.....
15	.....
.....	350

[2]

6 Add together the 3rd square number and the 5th square number.

..... [1]

7 Jamila collects the spelling test results of girls in her class.

Here is her data.

**Girls' spelling test results**

23	17	11	21	18	24
5	23	10	20	26	19
26	21	21	19	17	21

(a) Calculate the mean test result for the girls.

..... [1]

(b) Jamila starts to organise her data in a frequency table.

Complete her table.

<b>Girls' results</b>	<b>Tally</b>	<b>Frequency</b>
1–5	/	1
6–10		
11–15	/	1
16–20		
21–25		
26–30	//	2

[1]

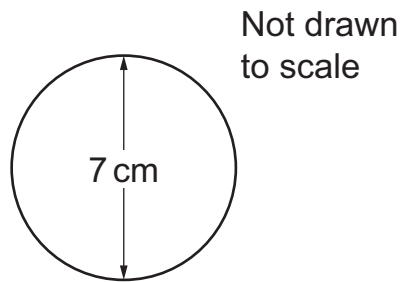
8 Write each fraction in its simplest form.

$$\frac{6}{30} = \dots\dots\dots$$

$$4\frac{8}{20} = \dots\dots\dots$$

[2]

9 Here is a sketch of a circle.



Draw the circle accurately.  
Use a pair of compasses.

[1]

10 Samira writes,

$$35 - 20 \div 5 = 3$$

Samira has made an error.

Explain her error.

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

11 Here are the numbers of people waiting at six bus stops.

2            7            7            3            6            4

Write the median number of people waiting at the bus stops.

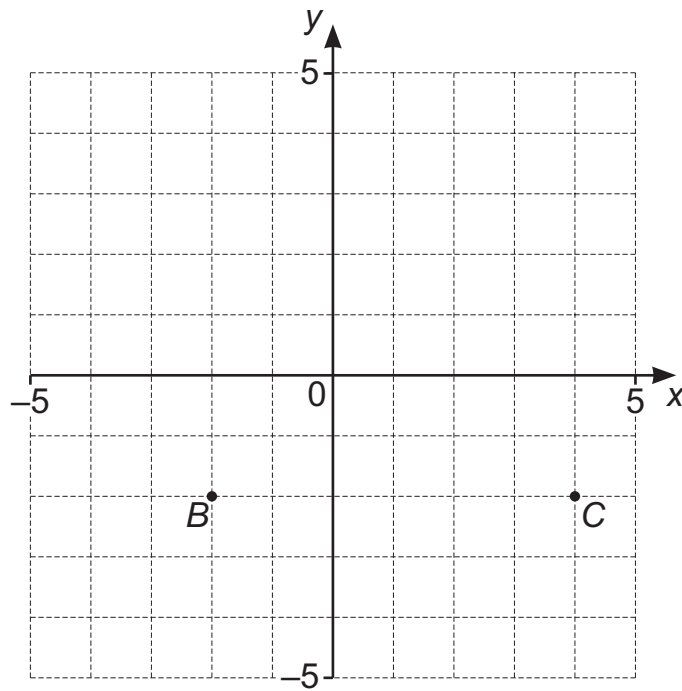
..... [1]

12 A ball of string is 600 cm long.  
 Gabriella uses 120 cm of the string.

Write the percentage of the string that Gabriella uses.

..... % [1]

13 Here is a coordinate grid.



(a) Plot the point  $A(-2, 3)$ .

[1]

(b) Points  $B$  and  $C$  are joined to make a straight line.

Write the coordinates of the point on the line that is halfway between  $B$  and  $C$ .

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

14 Draw a line to match each division to the correct fraction.

	$\frac{1}{2}$
	$1\frac{1}{4}$
$5 \div 4$	$\frac{4}{5}$
	$\frac{8}{4}$
$8 \div 5$	$1\frac{1}{5}$
	$\frac{8}{5}$
$4 \div 8$	

[2]

15 Yuri wants to make a necklace.  
For every three white beads he uses one black bead.



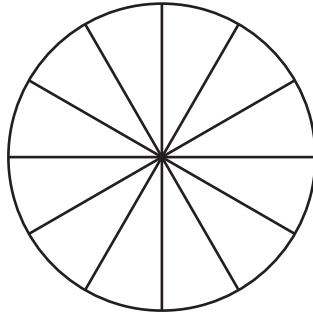
He continues the pattern in the same way.  
The completed necklace has 30 beads.  
The ratio of white to black beads is **not** 3 : 1

Explain.

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



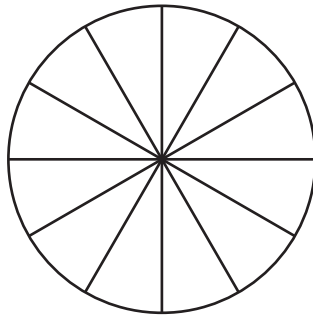
16 (a) Here is a spinner with 12 equal sections.



Shade the spinner so that there is a 5 out of 6 chance of spinning white.

[1]

(b) Here is a different spinner with 12 equal sections.



Mia colours the whole spinner using only yellow, red and blue.  
She colours **two** sections yellow.  
There is a 25% chance of spinning blue.

Write the chance of spinning red.

..... out of ..... chance [1]

17 Draw a line to match **all** the pairs of equivalent values.

60%

 $\frac{1}{4}$ 

0.25

 $\frac{4}{5}$ 

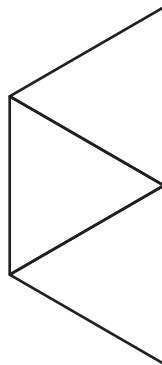
80%

 $\frac{3}{5}$  $\frac{6}{100}$ 

0.06

[2]

18 Complete the net of the triangular based pyramid.



[1]

19 Carlos has some photo frames.



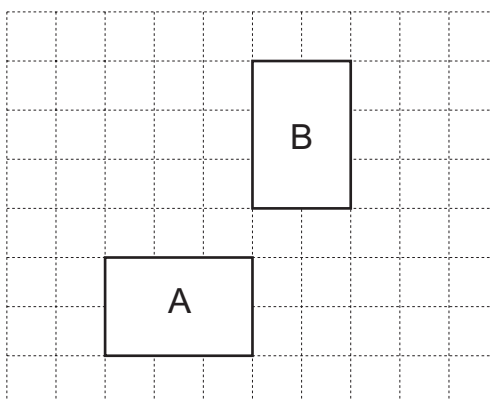
He measures the sides of each frame and records their perimeters in centimetres. The lengths of **all** the sides are whole numbers.

Tick (✓) the boxes in the table that could be correct.

Perimeter (cm)	Rectangular frame	Square frame
50	<input type="checkbox"/>	<input type="checkbox"/>
36	<input type="checkbox"/>	<input type="checkbox"/>
45	<input type="checkbox"/>	<input type="checkbox"/>
28	<input type="checkbox"/>	<input type="checkbox"/>

[2]

20 Chen tries to translate rectangle A. His answer is rectangle B.



Chen has made an error.

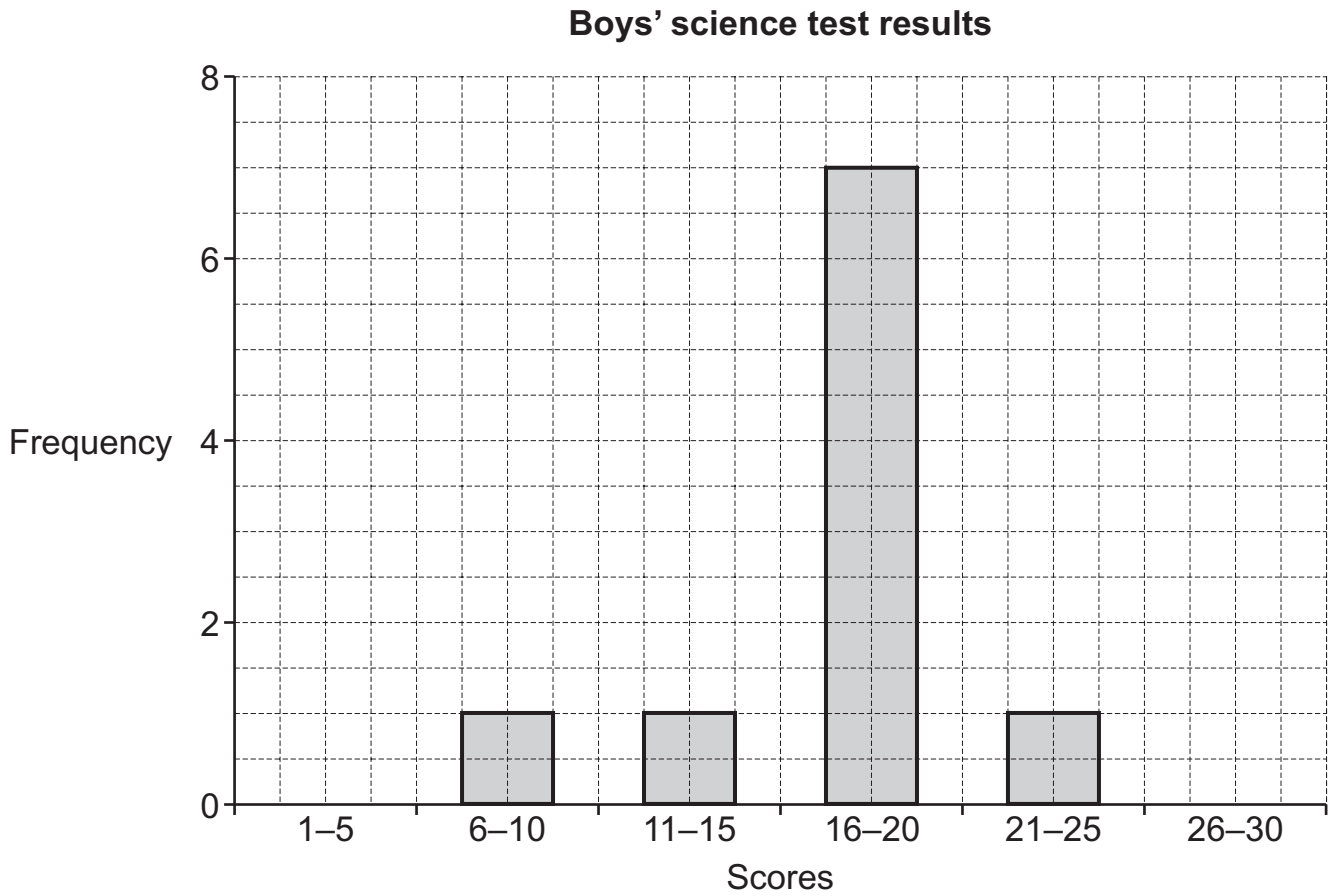
Explain how you know.

.....

..... [1]

21 Class 6 complete a science test.  
Ahmed collects all the results.

Here is the data for the boys' test results.



Here is the data for the girls' test results.

Girls' test results	Frequency
1-5	2
6-10	5
11-15	6
16-20	1
21-25	7
26-30	1

Ahmed compares the results for the boys and the girls.

(a) Here are some words.

boy                  boys                  girl                  girls

Use some of these words to complete the sentences.

The range of marks is greater for the .....

More ..... than ..... scored from 11 to 20

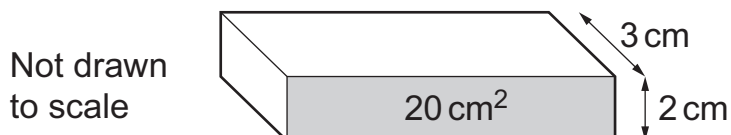
The highest mark was scored by a .....

The lowest mark was scored by a ..... [2]

(b) Look at the data for the boys and girls.  
Identify a problem with Ahmed's investigation.

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

22 Here is a cuboid.



Calculate the surface area of the cuboid.  
Show your working.

..... cm<sup>2</sup> [2]

**23 (a)** Mike adds  $\frac{2}{3}$  and  $\frac{1}{4}$

He writes  $1\frac{1}{12}$  as the answer.

Without adding  $\frac{2}{3}$  and  $\frac{1}{4}$  explain how you know Mike is wrong.

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

**(b)** Eva adds  $\frac{2}{5}$  and  $\frac{1}{6}$

She writes  $\frac{7}{11}$  as the answer.

Without adding  $\frac{2}{5}$  and  $\frac{1}{6}$  explain how you know Eva is wrong.

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

**24** 6 oranges cost the same as 4 melons.  
 3 apples cost the same as 2 oranges.  
 A melon costs \$3

Calculate the cost of 12 apples.  
 Show your working.

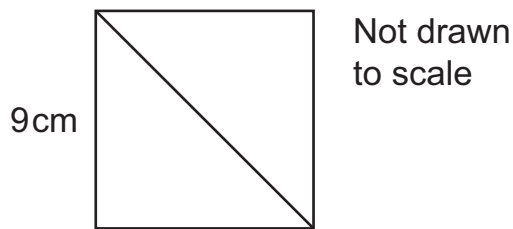
\$ ..... [2]

- 25** Oliver and Pierre both choose the **same** number less than 100  
Oliver divides the number by 7 and the remainder is 6  
Pierre divides the number by 5 and the remainder is 3

Write the largest number they can choose.

..... [1]

- 26** Here is a square made of two triangles.



The length of one side of the square is 9 cm.

Calculate the area of **one** of the triangles.

..... cm<sup>2</sup> [2]

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