Cambridge Assessment International Education

Mathematics

Stage 5

Paper 1

2024

Cambridge Primary Progression Test

Name

Class

Date

45 minutes

Additional materials: Set square
Tracing paper (optional)

INSTRUCTIONS
- Answer **all** questions.
- Write your answer to each question in the space provided.
- You should show all your working on the question paper.
- You are **not** allowed to 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 [ ].

1 Calculate.

237 + 654

....

1508 – 316

....

[2]

2 Draw a ring around each number that is divisible by 4

224   240   304   434   422

[1]

3 Here is a number statement.

$$\frac{1}{5} < \frac{3}{10}$$

Tick (✓) to show if this statement is correct.

Yes ☐   No ☐

Explain how you know.

....

....

[1]

4 Write a different number in each box to complete the statements.

$$0.45 = 0.4 + \boxed{}$$

$$0.45 = 0.3 + \boxed{}$$

[1]

5 Calculate.

$6.3 \div 10$

.... [1]

6 Write these times in order, starting with the earliest.

13:50   20 minutes to 2 in the afternoon   1.45 pm
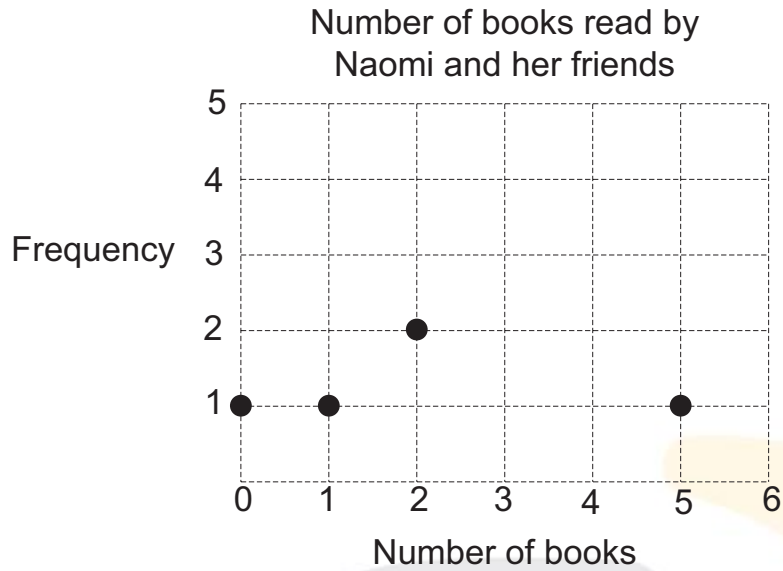
....
earliest   latest

[1]

7 Naomi and her friends record the number of books they read in a month.
Here is their data.

3   4   2   5   0   1   6   4   3   6   4   2

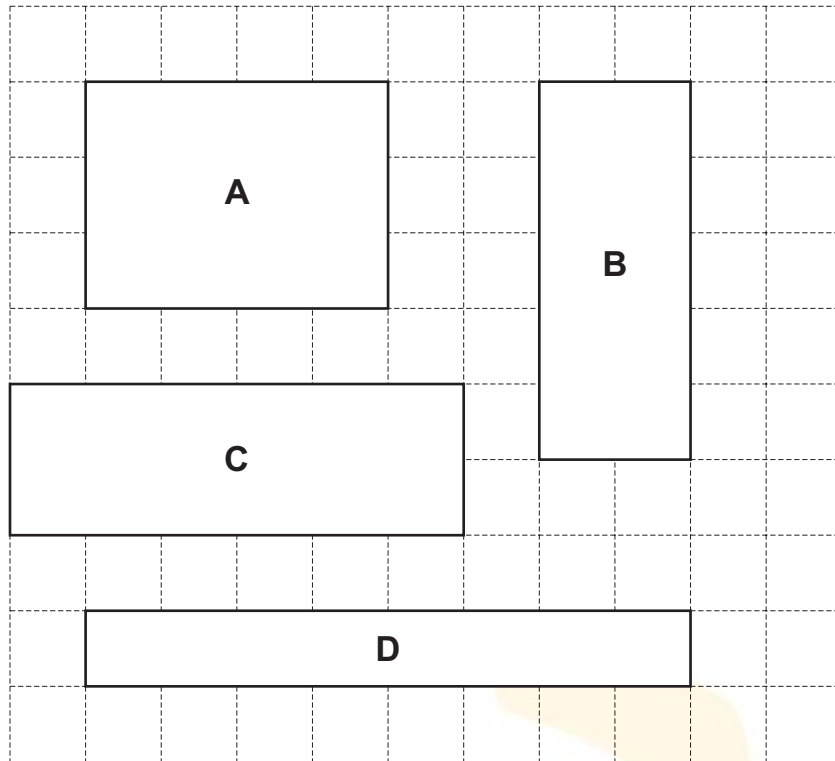Some of their data is recorded on a dot plot.

Number of books read by
Naomi and her friends

Complete the dot plot. [1]

8 Draw a line to match each calculation to the correct answer.

	6
$\frac{2}{3}$ of 15	7
	8
$\frac{4}{5}$ of 10	9
	10

[1]

9 Here are four rectangles drawn on a grid of squares.

(a) Two of the rectangles have the same **perimeter**.

Write the letters of these two rectangles.

.... [1]

(b) Two of the rectangles have the same **area**.

Write the letters of these two rectangles.

.... [1]

10 Jamila sorts some numbers using a Carroll diagram.

	Multiples of [ ]		Not multiples of [ ]	
Multiples of [ ]	30	80	15	5
Not multiples of [ ]	16	6	3	13

Write a number in each box to complete the Carroll diagram. [1]

11 Samira wants to know if more people like cheese flavour chips than plain flavour chips.
She plans to ask only **one** question.

Tick (✓) the question Samira should ask.

Do you like chips?	
What is your favourite flavour of chips?	
Do you like cheese flavour chips?	
Do you prefer cheese or plain flavour chips?	
Do you like plain flavour chips?	

[1]

12 Lily lives in Cairo.
Her grandmother lives in Buenos Aires.
Cairo is 5 hours ahead of Buenos Aires.
Lily phones her grandmother at 1 pm.

Write the time her grandmother's phone rings in Buenos Aires.

.... [1]

13 (a) Here is a shape made of squares.
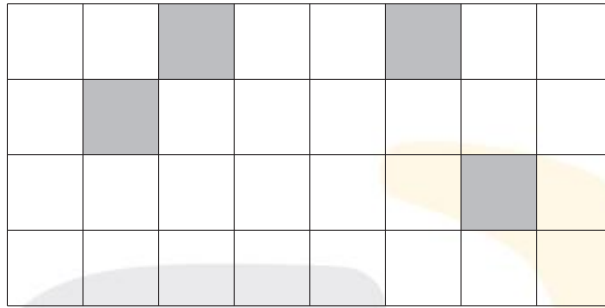
Shade 4 more squares so that the shape has **exactly** 2 lines of symmetry.   [1]

(b) Here is a shape made of equilateral triangles.
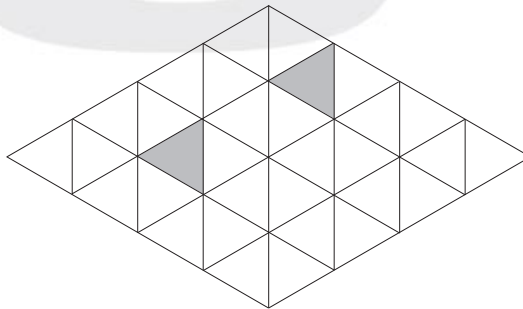
Shade 4 more triangles so that the shape has **exactly** 2 lines of symmetry.   [1]

14 Hassan wants to know the number of children in two classes who have a pet rabbit. He collects data and shows it on this bar chart.

Number of children who have a pet rabbit in Class1 and Class 2
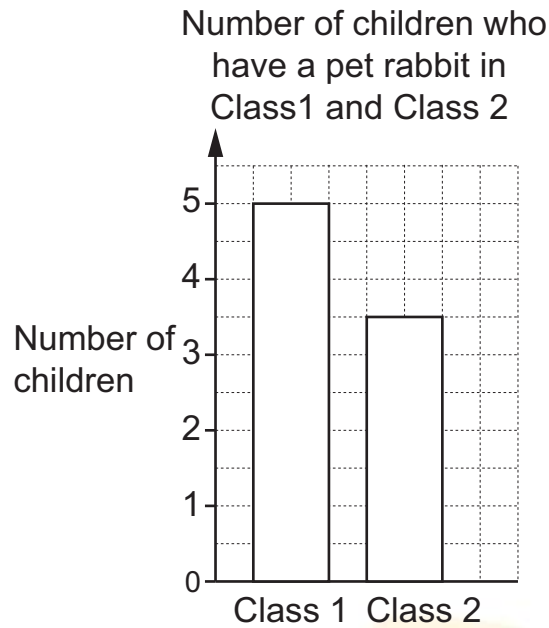
Hassan has made a mistake on the bar chart.

Explain his mistake.

....

.... [1]

15 Write a number in each box to make the calculation correct.

$$3 \times 5 \times 7 = \boxed{} \times \boxed{}$$

[1]

16 Chen has $\frac{1}{6}$ kg of flour.

He shares the flour into 3 equal piles.

Write the fraction of a kg of flour that is in each pile.

.... kg [1]

17 Write the **smallest** number that can be subtracted from 316 to give a 2-digit answer.

.... [1]

18 Carlos has some numbers.

~~1~~   2   3   4   5   6   7   ~~8~~   9

He starts to write equivalent fractions.
He uses two of his numbers.

$$\frac{1}{\boxed{}} = \frac{\boxed{}}{\boxed{}} = \frac{\boxed{}}{8}$$

Use **four more** of his numbers to complete the equivalent fractions.

[1]

19 Here is a sequence.

13   6   −1   ☐   ☐

The sequence continues in the same way.

Write the correct number in each box.

[1]

20 Draw a line to match each description to the correct number.

Description	Number

Description

3 ones 4 tenths 5 hundredths

3 tens 4 ones 5 tenths

3 tens 4 tenths 5 hundredths

Number

3.45

30.45

34.5

34.05

[2]

21 It takes Yuri 0.5 seconds to blink his eyes.

Write the maximum number of times Yuri could blink his eyes in one minute.

.... [1]

22 Safia has nine digit cards.
Her cards are numbered 1 to 9
She places them randomly in a line.
She turns over four cards to see the digits.

8	1	3	5				

Safia says,

'The next number is more likely to be greater than 5 than less than 5'

Tick (✓) to show if Safia is correct.

Yes ☐   No ☐

Explain how you know.

....

....

[1]

23 Here is a statement.

$$3\frac{2}{\square} = \frac{\square}{5}$$

Write a number in each box to make the statement correct.   [1]
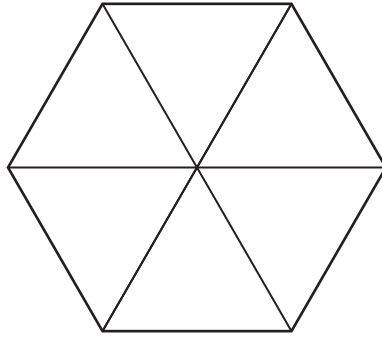
24 Here are drawings of four spinners.
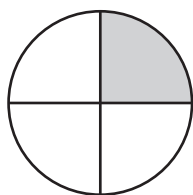
A
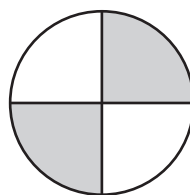
B
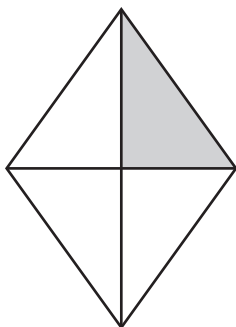
C
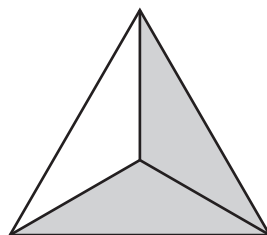
D

Ahmed wants to land on a shaded section when he spins a spinner.
He marks the likelihood of landing on a shaded section on a likelihood scale.

(a) Tick (✓) the scale that shows the correct likelihood marked for each spinner.

C   A   B   D

impossible   even   certain
                       chance

[ ]

A   C   B   D

impossible   even   certain
                       chance

[ ]

A and C B and D

impossible   even   certain
                       chance

[ ]

A and C   B   D

impossible   even   certain
                       chance

[ ]
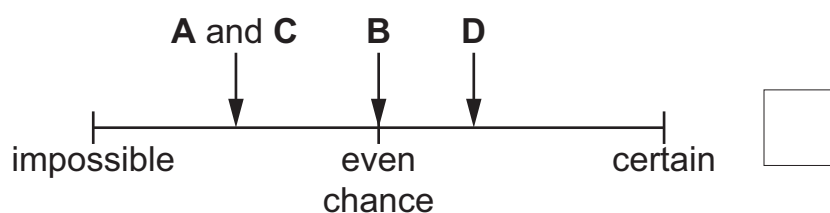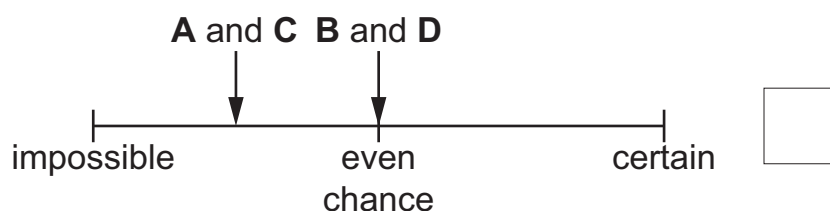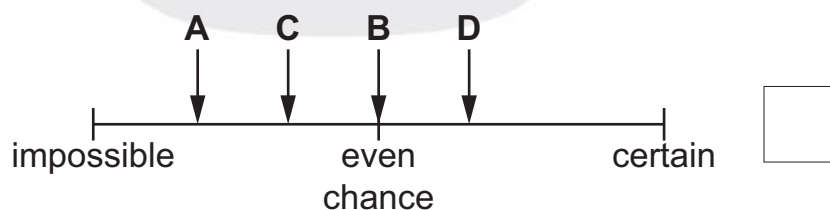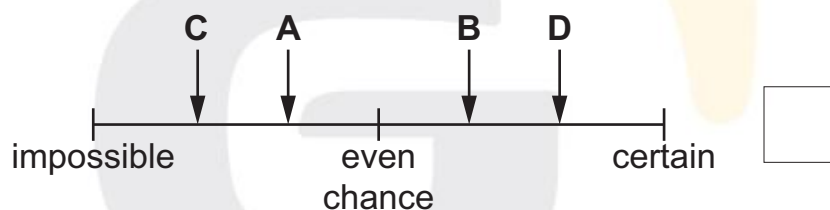
[1]

(b) Here is a new spinner.

Ahmed says,

'Spinner D and this spinner are equally likely to spin a shaded section.'

Shade the new spinner to make his statement correct.

[1]

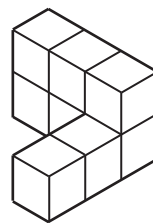**25** Here are drawings of some 3D models made with cubes.
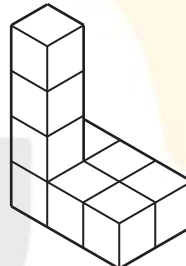
A   B
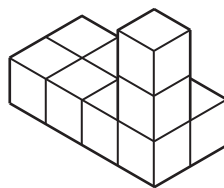
C   D

Draw a ring around the **two** models that are the same shape. [1]

26 A farmer sells eggs in trays.
There are 24 eggs in each tray.
Gabriella buys 16 trays of eggs.

Calculate the number of eggs she buys.

.... [1]

27 Pierre is standing northeast of Rajiv.

Write the correct direction in the sentence.

Rajiv is standing .... of Pierre.

[1]

28 Here is a rule for producing a number sequence.

> Add 2 to the previous term and
> multiply the answer by 7

Mia follows this rule.
Her first term is 4.9

Calculate her 3rd term.
Show your working.

.... [2]

29 Calculate the difference between 1.5 days and 1.5 hours.
Give your answer in hours and minutes.

.... hours .... minutes   [1]

30 Eva has five bags.
Each bag contains only black and white beads.
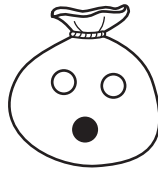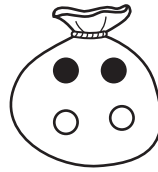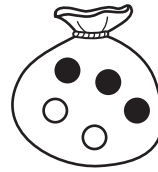
| A | B | C | D | E |

Eva picks one bead at random from a bag.

Write the letter of the bag where she is **most likely** to pick a black bead.

.... [1]

31 Write the correct number in the box.

$$\boxed{} \times 1000 = 1\,000\,000$$

[1]

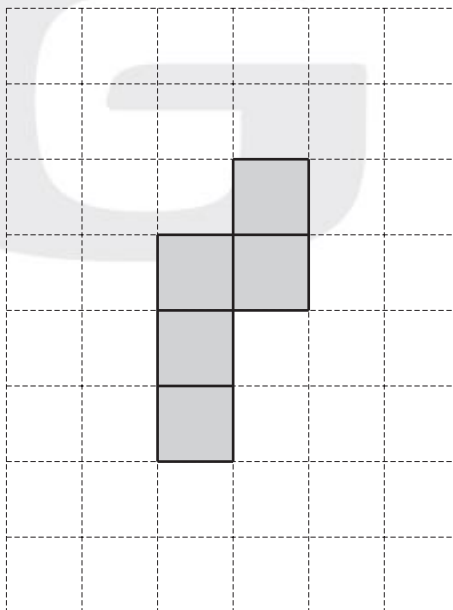**32** Anastasia chooses a 4-digit number.
The digits are all odd.
The digits are all different.
Her number rounds to 1500 when rounded to the nearest 100

Write the largest number that Anastasia could choose.

.... [1]

33 Here is the net of an open cube drawn on squared paper.

Angelique wants to add one extra square to make the net of a closed cube.

Shade **three different** squares Angelique could choose.

[1]

34 Youssef, Mike and Oliver each throw a ball.
Youssef's longest throw is 16.37 metres.
Mike's longest throw is 2.64 metres longer than Youssef's.
Oliver's longest throw is 4.36 metres shorter than Mike's.

Calculate the length of Oliver's longest throw.

.... metres [1]