Cambridge Assessment International Education

Mathematics

Stage 6

Paper 1 **2022**

Cambridge Primary Progression Test

Name

Class

Date

45 minutes

Additional materials: Compasses
Protractor
Tracing paper (optional)

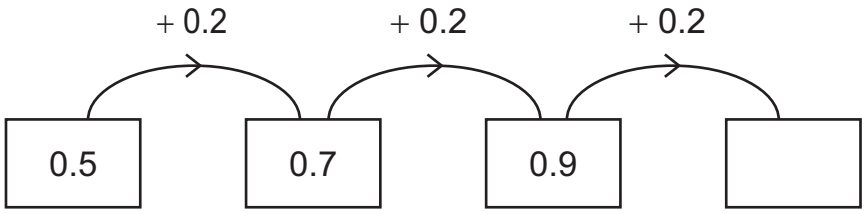
INSTRUCTIONS

- 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 Here is part of a sequence.
The sequence continues in the same way.



Write the missing number in the box. [1]

2 **(a)** In Moscow the temperature is –15 °C.
The temperature rises by 6 °C.

Write the new temperature.

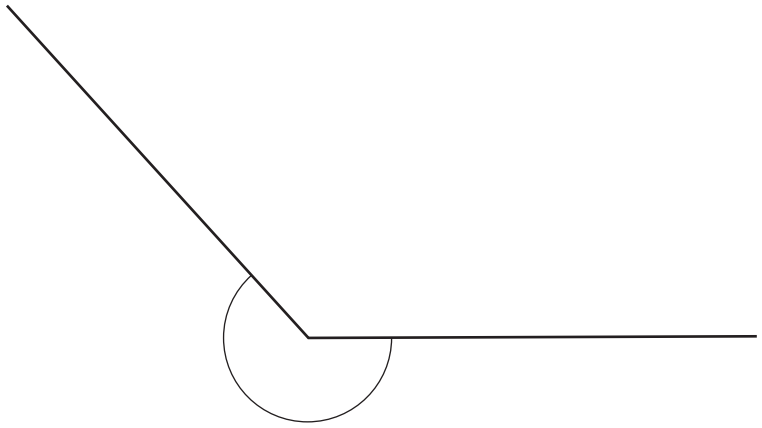
..... °C [1]

(b) In Juneau the temperature is 4 °C.
An hour later the temperature is –3 °C.

Write the number of degrees the temperature falls.

..... degrees [1]

3 Measure the marked angle.
Use a protractor.



..... ° [1]

4 Round 17.37 to the nearest tenth.

..... [1]

5 Draw a ring around the fraction that is equivalent to $4\frac{8}{10}$

$2\frac{4}{5}$ $4\frac{3}{5}$ $4\frac{4}{5}$ $2\frac{8}{10}$ $4\frac{4}{10}$

[1]

6 Draw a ring around **all** the multiples of 4

3004 4034 4242 2424 2332

[1]

7 **(a)** Multiply 7.35 by 3

..... [1]

(b) Divide 84.42 by 7

..... [1]

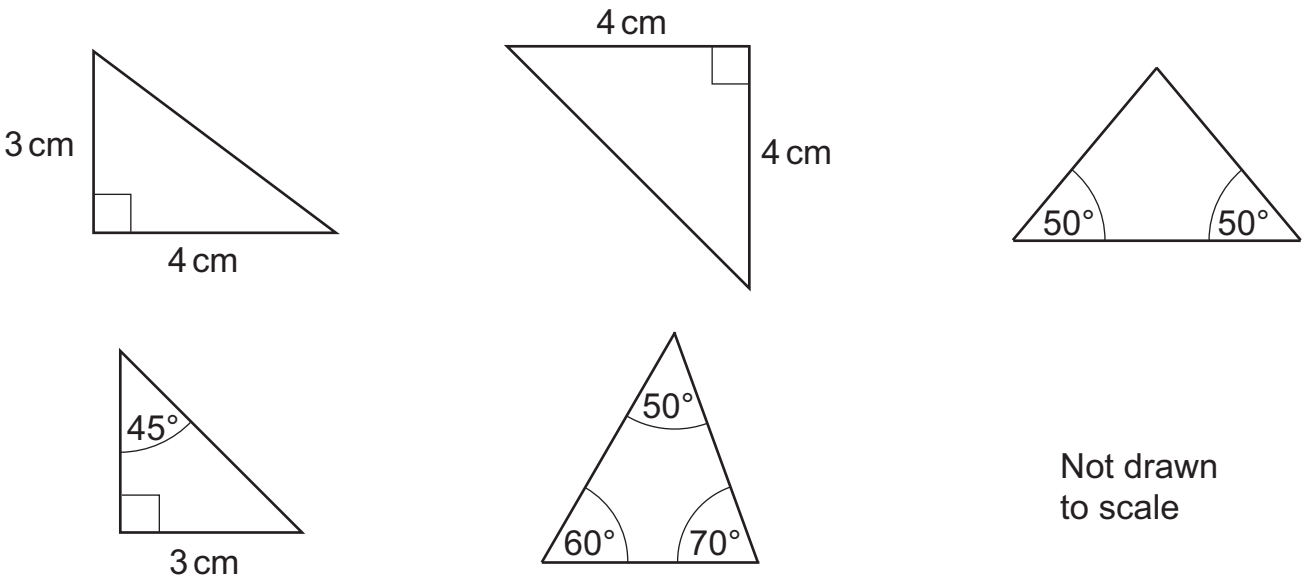
8 A fair 1–6 dice is thrown.

Draw a line to match the event to the mutually exclusive event.

	2 is thrown
	2 or 3 is thrown
An even number is thrown	3 is thrown
	3 or 4 is thrown
	2, 4 or 6 is thrown

[1]

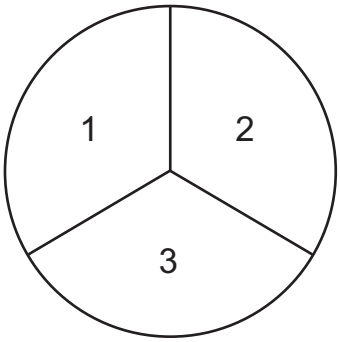
9 Here are some triangles.



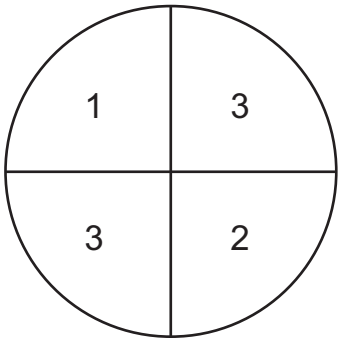
Not drawn to scale

Draw a ring around **all** the scalene triangles. [1]

10 Here are two spinners.
Each spinner has sections that are equal sizes.



A



B

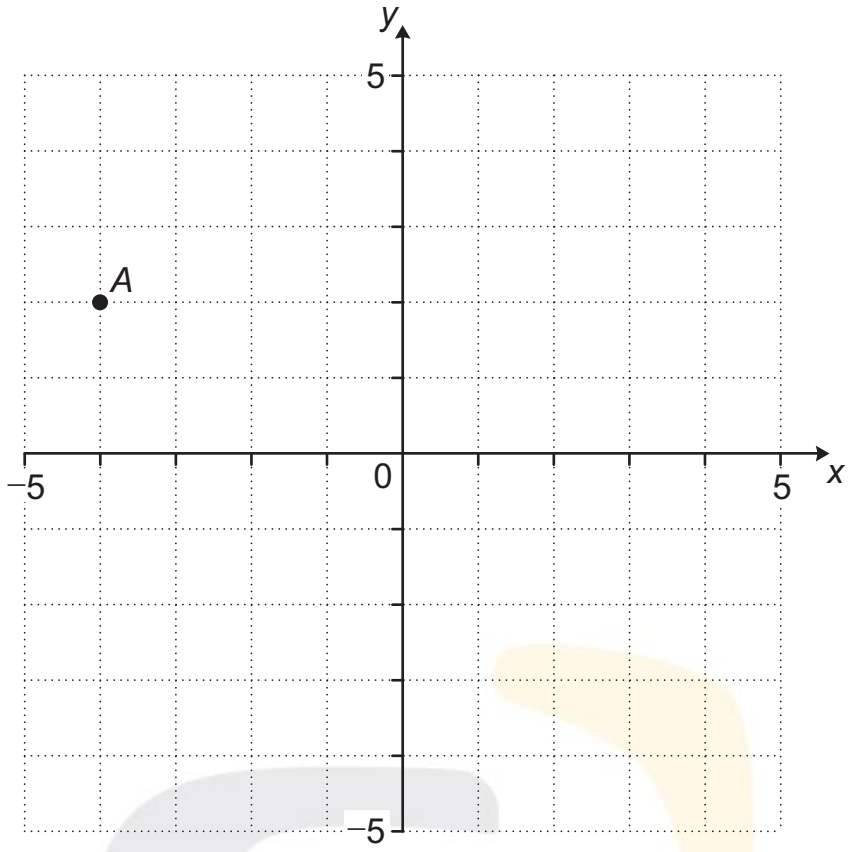
Angelique spins each spinner once.

Put a tick (✓) to show the correct likelihood for each outcome.

	Likelihood		
Outcome	**More likely on Spinner A**	**More likely on Spinner B**	**Equally likely on Spinner A and B**
Spin an odd number			
Spin a number 2			
Spin a number less than 3			
Spin a number 4			

[2]

11 Here is a coordinate grid.



(a) Write the coordinates of the point *A*.

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

(b) Plot the point with the coordinates (3, −1). [1]

12 Tick (✓) the time that is equivalent to 4.4 minutes.

4 minutes and 40 seconds	☐
440 seconds	☐
244 seconds	☐
264 seconds	☐
280 seconds	☐

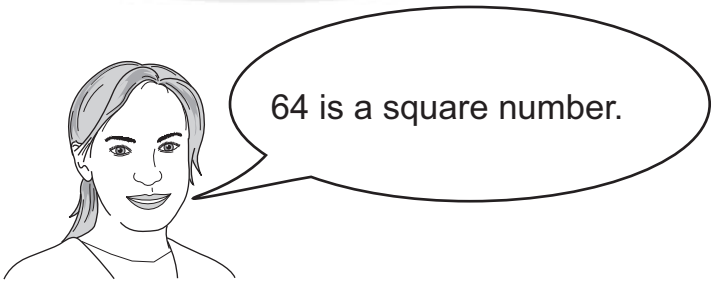
[1]

13 Calculate.

$7 + 3 \times (5 + 4)$

..... [1]

14 Eva says,



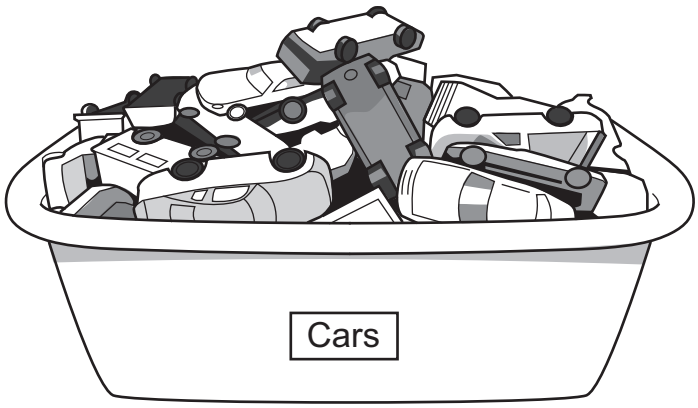
Eva is correct.

Explain how you know.

.....

..... [1]

15 Chen and Mike each have some toy cars.



The number of cars that Chen has is represented by C.
The number of cars that Mike has is represented by M.

Mike has **twice** as many cars as Chen.

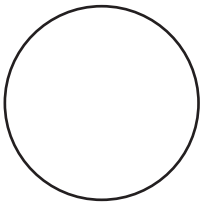
(a) Find M when C is 20

..... [1]

(b) Find C + M when M is 20

..... [1]

16 Here is a circle.



Here are three symbols.

>	<	=

Write the correct symbol in each box.

The length of the circumference ☐ the length of the diameter.

The length of the diameter ☐ the length of the radius.

[1]

17 Naomi thinks of two different numbers.

Both numbers have 2 digits.
She multiplies the two numbers.
The answer is 360

Write three **different** pairs of numbers that Naomi could be thinking of.

Write a 2-digit number in each box to make each statement correct.
One has been done for you.

10	×	36	=	360
	×		=	360
	×		=	360
	×		=	360

[2]

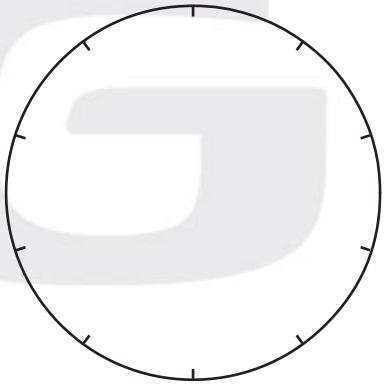
18 Twenty children are asked about their favourite sport.
Here are the results.

Favourite sport	Frequency	Proportion (%)
Tennis		
Football	2	
Swimming	6	
Running	8	

(a) Complete the table. [1]

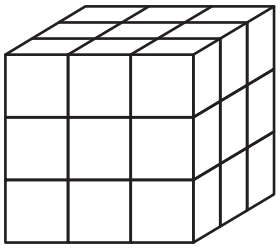
(b) The data is shown in a pie chart.

Shade the correct section for swimming.

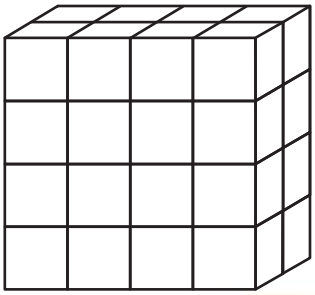


[1]

19 Here is a diagram of a solid cube made of unit cubes.



Here is a diagram of a solid cuboid made of unit cubes.



How many **more** unit cubes are in the cuboid than the cube?

..... [1]

20 Here are three symbols.

>	<	=

Write the correct symbol in each box.

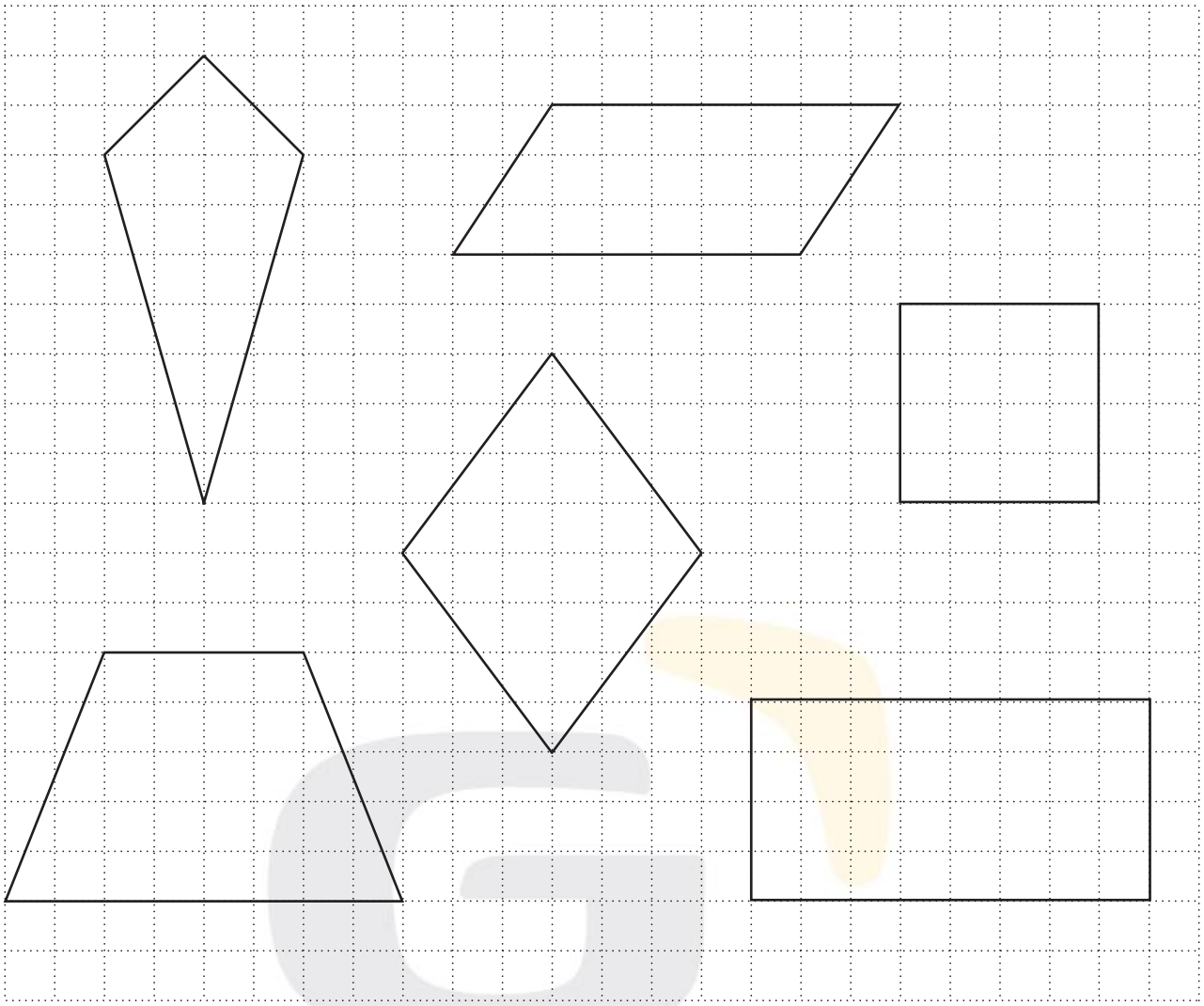
$4 \times \frac{3}{4} \square 2$

$\frac{1}{4} \div 4 \square \frac{1}{2}$

$4 \times \frac{3}{3} \square 4$

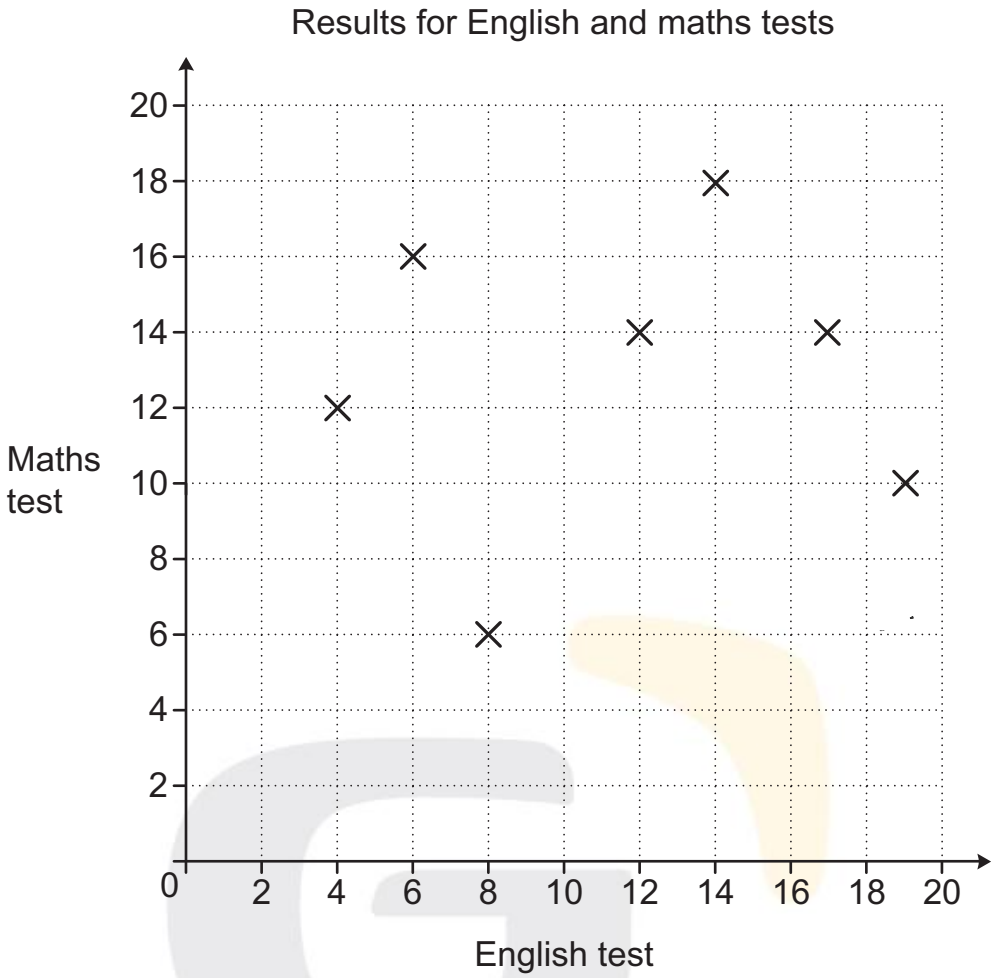
[2]

21 Here are some quadrilaterals drawn on a grid of squares.



Draw a ring around **each** shape with diagonals that cross at right angles. [2]

22 Seven children sat an English test and a maths test.
The results for the seven children are shown in a scatter graph.



(a) Yuri scores 14 in the English test.

Write his maths score.

..... [1]

(b) Write the number of children that score more in maths than English.

..... [1]

(c) Write the median score for the English test.

..... [1]

23 Write a number in the box to make the statement correct.

$$17 + 25 \times \square \times 2 = 367$$

[1]

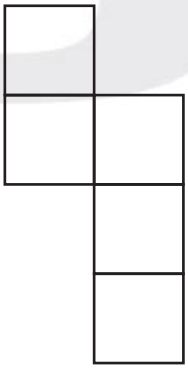
24 There are 32 children in Class 6

75% of the children like apples.
75% of the children who like apples **also** like oranges.

Work out the number of children who like **both** apples and oranges.
Show your working.

..... [2]

25 Here is the net of an open cube.



One more square is needed to make the net of a closed cube.

How many **different** places can the extra square be added to make the net of a closed cube?

..... [1]

26 Draw a ring around the number that is divisible by 8, 6 and 9

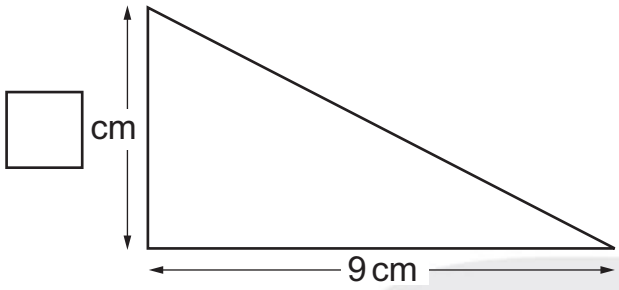
9405 9414 9441 9504 9594

[1]

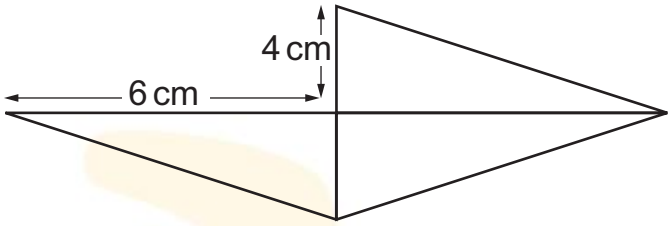
27 Shapes A and B both have the same area.

Shape A is made of one right-angled triangle.
Shape B is made of three identical right-angled triangles.

Shape A



Shape B



Not drawn to scale

Calculate the missing height of shape A.
Show your working.

..... cm [2]