Cambridge Primary Checkpoint

CANDIDATE NAME

CENTRE NUMBER

CANDIDATE NUMBER

MATHEMATICS **0845/02**

Paper 2 **October 2018**

45 minutes

Candidates answer on the Question Paper.

Additional Materials: Pen Protractor
Pencil Calculator
Ruler Tracing Paper (optional)

READ THESE INSTRUCTIONS FIRST

Write your Centre number, candidate number and name in the spaces at the top of this page.
Write in dark blue or black pen.

DO **NOT** WRITE IN ANY BARCODES.

Answer **all** questions.
Calculator allowed

The number of marks is given in brackets [ ] at the end of each question or part question.
You should show all your working in the booklet.
The total number of marks for this paper is 40.

This document consists of **16** printed pages.

CAMBRIDGE
International Examinations

[Turn over

1 Put these fractions in order starting with the smallest.

$$\frac{5}{10} \qquad \frac{2}{10} \qquad \frac{9}{10} \qquad \frac{6}{10}$$

....

   smallest   largest

[1]

2 Here are some digit cards.

| 1 | 3 | 5 | 7 | 9 |

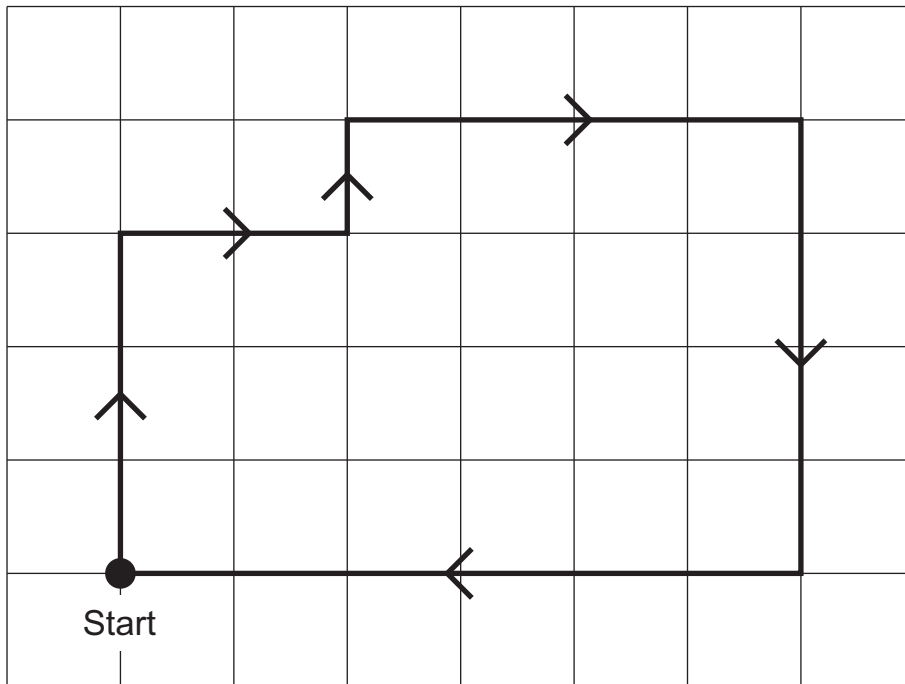Use three of these digits to complete this calculation.

| | 0 | × | | = | 6 | | 0 |

[1]

3 Write the missing numbers in this sequence.

................,   3986,   3886,   3786, ...

[1]

4 Aiko draws a shape on a square grid.

Start

Aiko writes instructions to draw the shape.
She begins at the corner labelled start.

Complete her instructions.

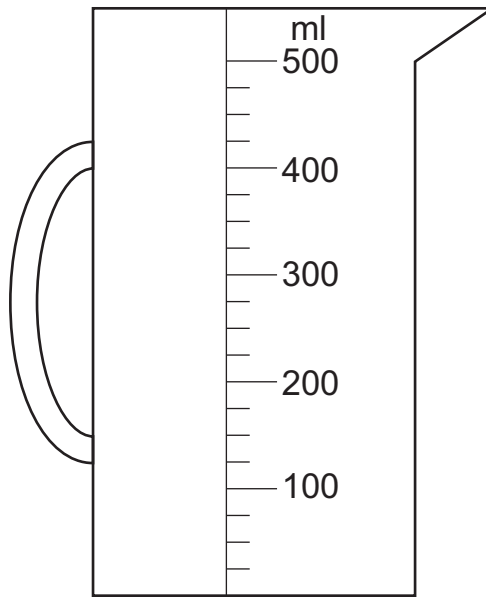<div style="text-align:center">

Up 3

Right 2

....

....

....

....

</div>

[1]

5 (a) Rajiv pours 175 ml of water into a measuring jug.

| ml |
| 500 |
| 400 |
| 300 |
| 200 |
| 100 |

Draw a line to show the level of water in the jug. [1]

(b) Rajiv needs a total of 400 ml of water.

How much water does he need to add?
Give your answer in litres.

.... l [1]

6 Convert 3.5 m into centimetres.

Draw a ring around the correct answer.

35 cm   305 cm   350 cm   3500 cm

[1]

7 The table shows the heights of three children.

Name of child	Height (cm)
Yuri	147
Mia	119
Lily	126

The graphs show the **same** information.

Graph A   Graph B   Graph C
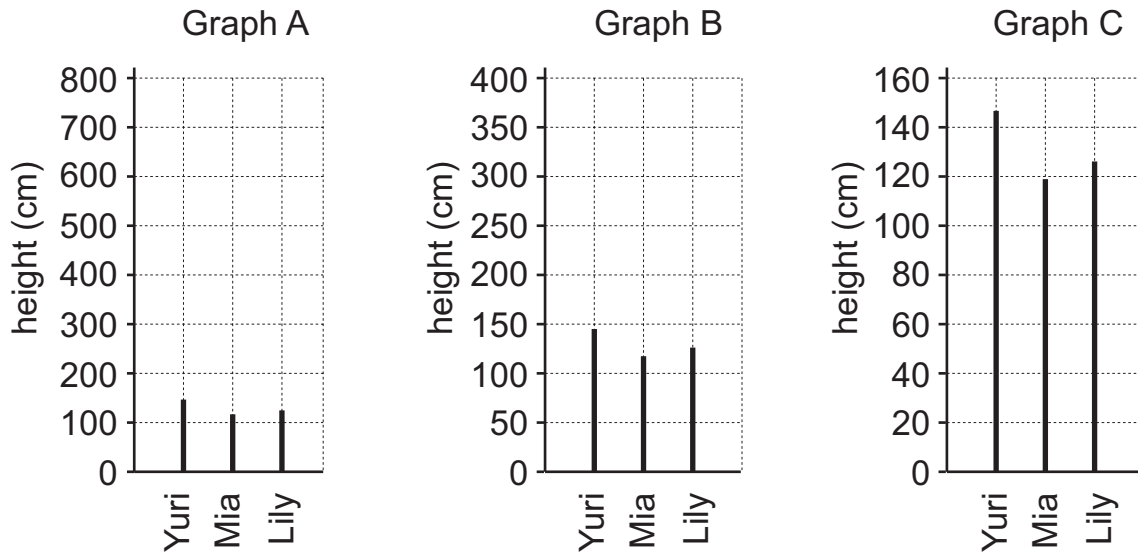
Which graph shows the results most clearly?
Explain your answer.

....

.... [1]

8 Draw a line to join each division question to the correct rounding decision.

Division question   Rounding decision

16 apples are put into bags of 5
How many full bags are there?

round up

A minibus holds 10 people.
56 people are going on a trip.
How many minibuses are needed?

A pumpkin costs $3   round down
How many can you buy with $10?

35 candles are put into 4 boxes.
How many boxes are needed to hold
them all?

[2]

9 Draw the reflection of the shape in the mirror line.
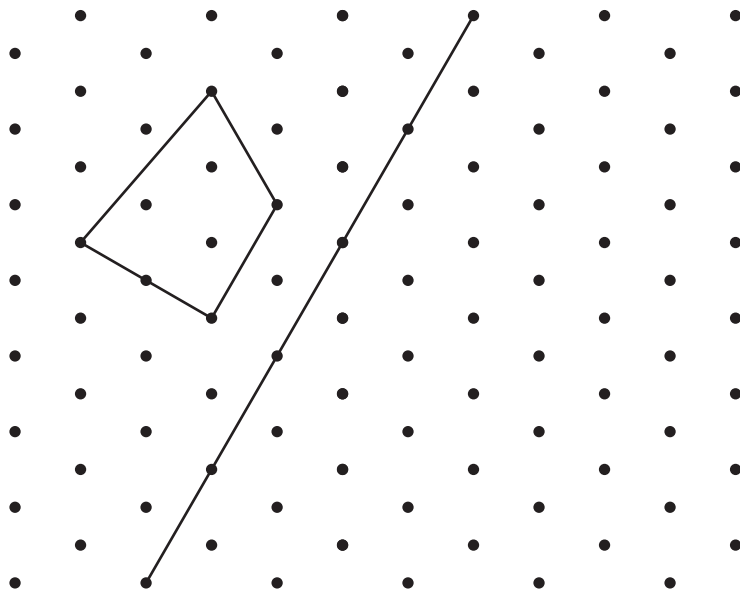
[1]

10 A bag contains 24 beads which are red or green or blue.

$\frac{1}{3}$ of the beads are red.

$\frac{1}{4}$ of the beads are blue.

How many of the beads are green?

Show your working.

..........................beads **[2]**

11 Complete the following.

(a) $19 \div 3 = 6 \frac{\boxed{}}{3}$ **[1]**

(b) $\boxed{} \div 4 = 3\frac{3}{4}$ **[1]**

12 Use the digits 1, 2, 7 and 8 to complete the calculation.

$$\boxed{}\,\boxed{} \times \boxed{}\,\boxed{} = 1827$$

[1]
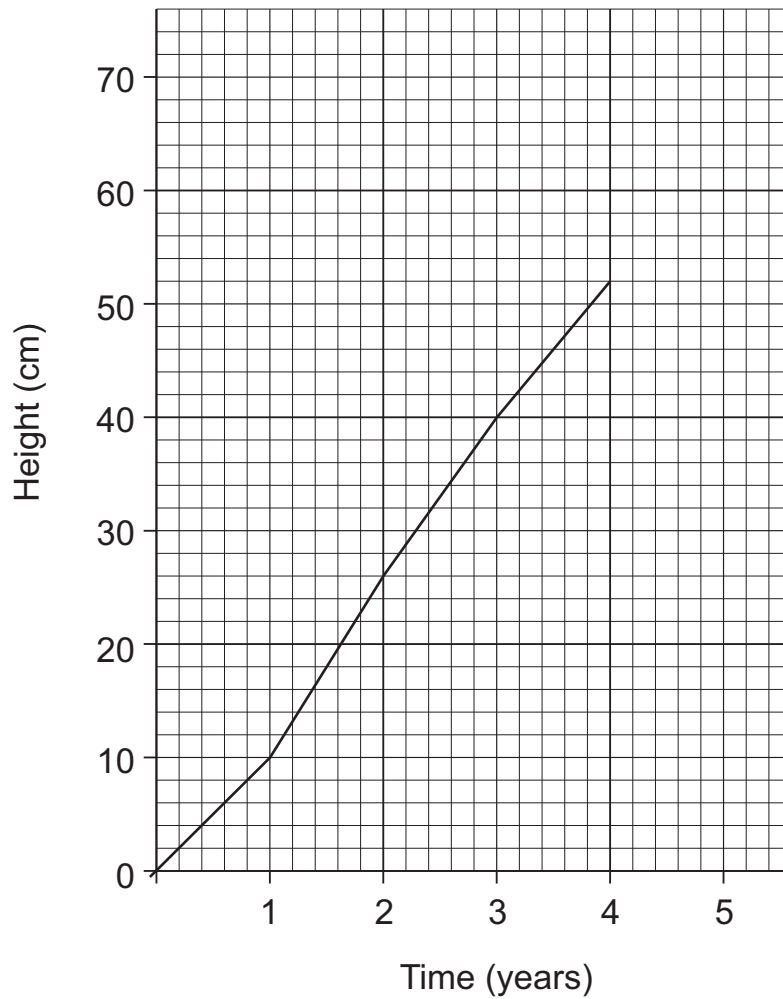
13 Here is a shape drawn on a co-ordinate grid.
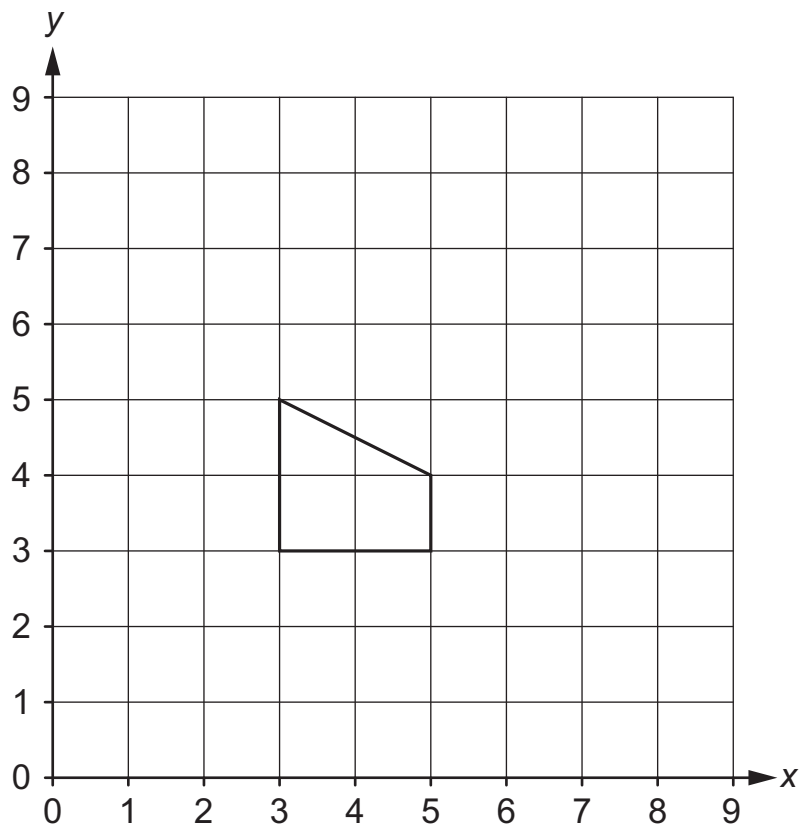
The shape is translated 2 squares right and 3 squares down.

Draw the new position of the shape. [1]

14 The graph shows the height of a maple tree at the end of each year.

Graph to show the
growth of a maple tree
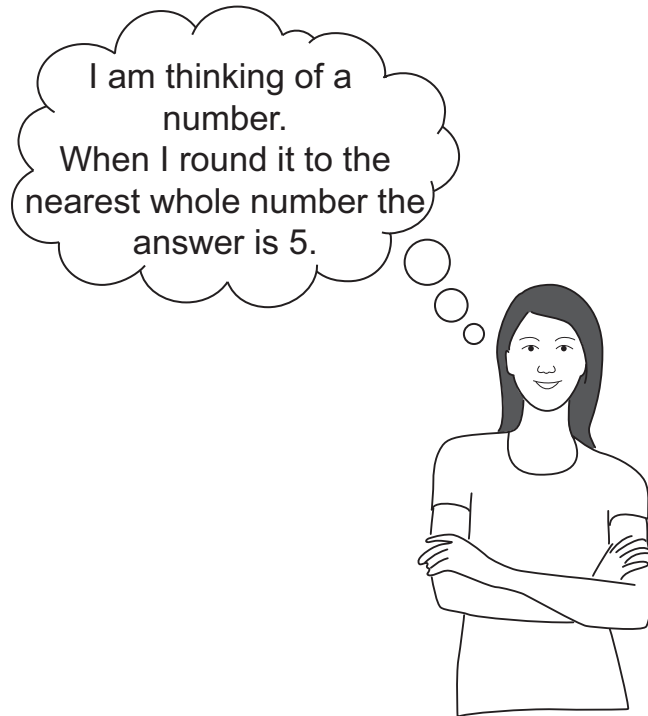

(a) How tall was the tree after 3 years?

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

(b) The tree grows 15 cm in the fifth year.

Plot the new height of the tree on the graph.   [1]

15 Mia says,

I am thinking of a number.
When I round it to the nearest whole number the answer is 5.

What is the **smallest** number that Mia could have chosen?

.... [1]

16 Here are three signs.

= > <

Write the correct sign in each box.

26 + 54 [ ] 100 – 20

7 × 9 [ ] 8 × 8

56 ÷ 7 [ ] 76 – 69

[1]

17 Carlos says,

All multiples of three are odd.
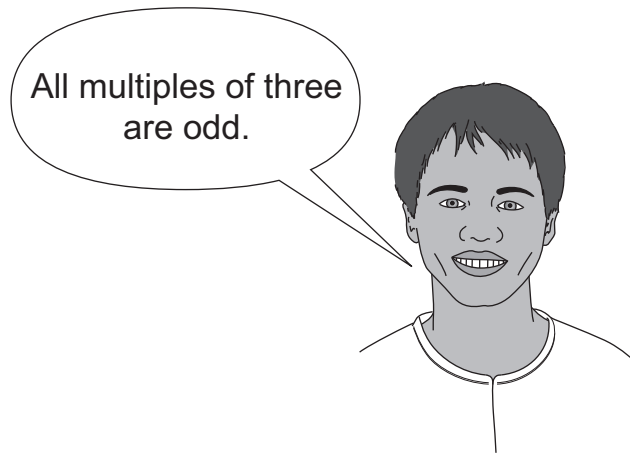
Carlos is **not** correct.

Give an example to explain why.

....

.... [1]

18 Write **one** number in each space on the sorting diagram.

	Less than 50	More than 50, less than 100
Divisible by 4		
Divisible by 25		

[2]

19 Here is a diagram.
Each side of the square totals 10

Complete the diagram.
Four decimal numbers are already in place.
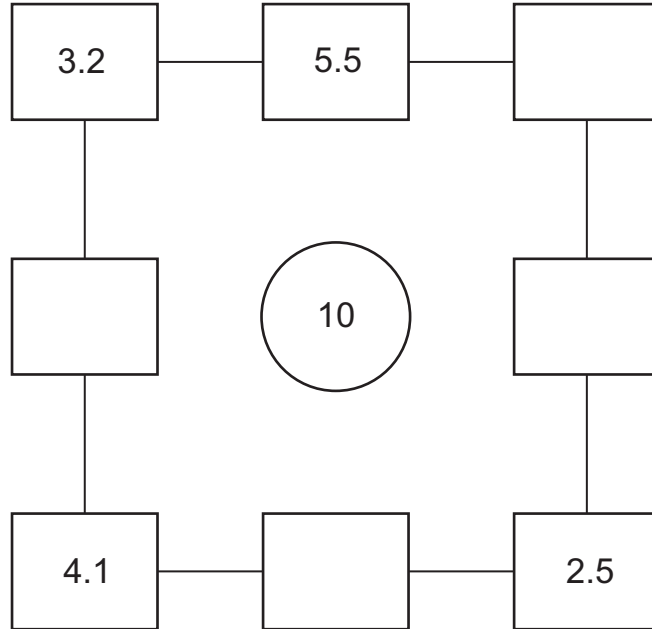
[2]

20 The Romans used letters to stand for numbers.

$$I = 1 \qquad V = 5 \qquad X = 10$$

Here are the first three rows of a 100 square written in Roman numerals.

I	II	III	IV	V	VI	VII	VIII	IX	X
XI	XII	XIII	XIV		XVI		XVIII	XIX	
XXI	XXII	XXIII	XXIV	XXV		XXVII			XXX

Fill in the missing numbers using the correct Roman numerals. [2]

21 Complete these equivalent fractions.

$$\frac{4}{\boxed{}} = \frac{20}{25} \qquad \frac{\boxed{}}{5} = \frac{24}{120}$$

[1]

22 Here is a number line.

```
|————————————————————————————|
0                         10 000
```

Draw an arrow (↓) to show where the number 7400 belongs on the line. [1]

23 The table below shows the number of children visiting a library during one week.

Mon	Tues	Wed	Thurs	Fri	Sat	Sun
36	34	34	42	34	35	36

(a) What is the mode?

.... [1]

(b) What is the median?

.... [1]

24 A fridge is set at 4 °C.
A freezer is set at –18 °C.

(a) What is the difference in temperature between the fridge and the freezer?

.... °C   [1]

(b) The temperature of the freezer drops by 2°.

Write down the new temperature of the freezer.

.... °C   [1]

25 Oliver has some identical rectangles.
Each rectangle measures 9 centimetres by 3 centimetres.

9 cm

3 cm
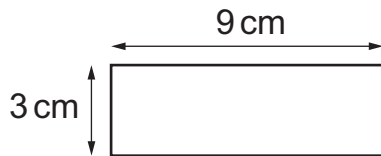
Not drawn to
scale

(a) What is the area of the rectangle?

.... cm^2 [1]

Oliver uses four of his rectangles to make a larger rectangle.
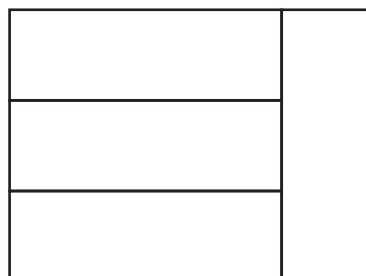
Not drawn to
scale

(b) What is the perimeter of the large rectangle?

.... cm   [1]

26 Here is a list of fractions and decimals.

$$\frac{1}{4} \qquad 0.05 \qquad 0.4 \qquad \frac{1}{2} \qquad 0.2 \qquad \frac{2}{5}$$

Write the fraction **and** the decimal that are equivalent.

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

27 Draw lines to join each item to the most suitable unit of measurement.

centimetres

| the distance from Buenos Aires to Rosario |

cm^2

| the area of a tennis court |

metres

m^2

| the length of a pencil |

kilometres

km^2

[1]

28 An airport has clocks showing the date and time in different parts of the world.

Beijing	**New Delhi**	**London**	**New York**	**Sydney**
30th August	29th August	29th August	29th August	30th August
01:55	23:25	18:55	13:55	03:55

London is 5 hours ahead of New York.

(a) How many hours ahead of London is Sydney?

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

(b) When it is 11:05 in New Delhi, what time is it in Beijing?

....   [1]