



Cambridge Primary Progression Test

Mathematics paper 2

Stage 5



45 minutes

Name

Additional materials: Ruler
Tracing paper (optional)
Calculator

READ THESE INSTRUCTIONS FIRST

Answer **all** questions in the spaces provided on the question paper.

Calculator allowed.

You should show all your working on the question paper.

The number of marks is given in brackets [] at the end of each question or part question.

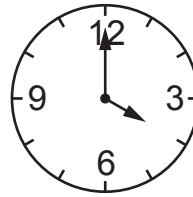
The total number of marks for this paper is 40.

For Teacher's Use

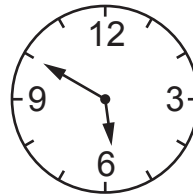
Page	Mark
1	
2	
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9	
10	
11	
12	
13	
14	
Total	

- 1 Draw a line to join each digital clock to the analogue clock that shows the same time.

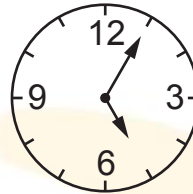
05:50



17:05



16:00



[1]

- 2 Write these numbers in order from smallest to largest.

3.41

3.14

3.25

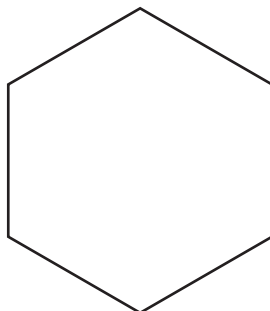
3.09

3.90

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

[1]

- 3 Draw **all** the lines of symmetry on this regular hexagon.



[1]

- 4 Youssef asks his friends to vote for their favourite flavour of crisps. The tally chart shows their votes.

Flavour	Number of friends
plain	
cheese and onion	
salt and vinegar	

- (a) How many friends did Youssef ask altogether?

..... friends [1]

- (b) Tick (✓) the pictogram that correctly shows the information in the tally chart.

stick figure represents 2 friends	
plain	stick figure stick figure stick figure stick figure stick figure stick figure
cheese and onion	stick figure stick figure stick figure
salt and vinegar	stick figure stick figure stick figure stick figure stick figure stick figure stick figure

☐

smiley face represents 1 friend	
plain	smiley face smiley face smiley face smiley face smiley face smiley face smiley face smiley face smiley face smiley face
cheese and onion	smiley face smiley face smiley face smiley face smiley face smiley face
salt and vinegar	smiley face smiley face smiley face smiley face smiley face smiley face smiley face smiley face smiley face smiley face smiley face smiley face smiley face smiley face smiley face smiley face

☐

square represents 4 friends	
plain	square square square
cheese and onion	square square
salt and vinegar	square square square square

☐

pentagon represents 5 friends	
plain	pentagon pentagon pentagon
cheese and onion	pentagon pentagon
salt and vinegar	pentagon pentagon pentagon

☐

[1]

- 5 Draw a line to match each circled fraction to an equivalent fraction. One has been done for you.

$\frac{1}{4}$ $\frac{4}{4}$ $\frac{1}{2}$ $\frac{2}{4}$ $\frac{3}{4}$	$\frac{1}{8}$ $\frac{4}{8}$ $\frac{1}{2}$ $\frac{2}{8}$ $\frac{3}{8}$
$\frac{1}{6}$ $\frac{4}{6}$ $\frac{1}{3}$ $\frac{2}{6}$ $\frac{3}{6}$	$\frac{1}{10}$ $\frac{4}{10}$ $\frac{1}{5}$ $\frac{2}{10}$ $\frac{3}{10}$

[2]

- 6 Here is a number pattern.

Write the missing numbers in each box.

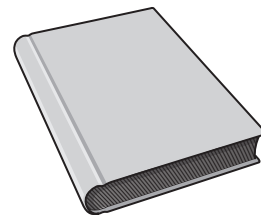


[2]

- 7 Safia's book has 136 pages.

She has read $\frac{1}{8}$ of it.

How many pages has she read?



..... pages [1]

- 8 Here are five calculation cards.

Draw a line to join two cards that have a total of 750

$$45 \times 41$$

$$13 \times 35$$

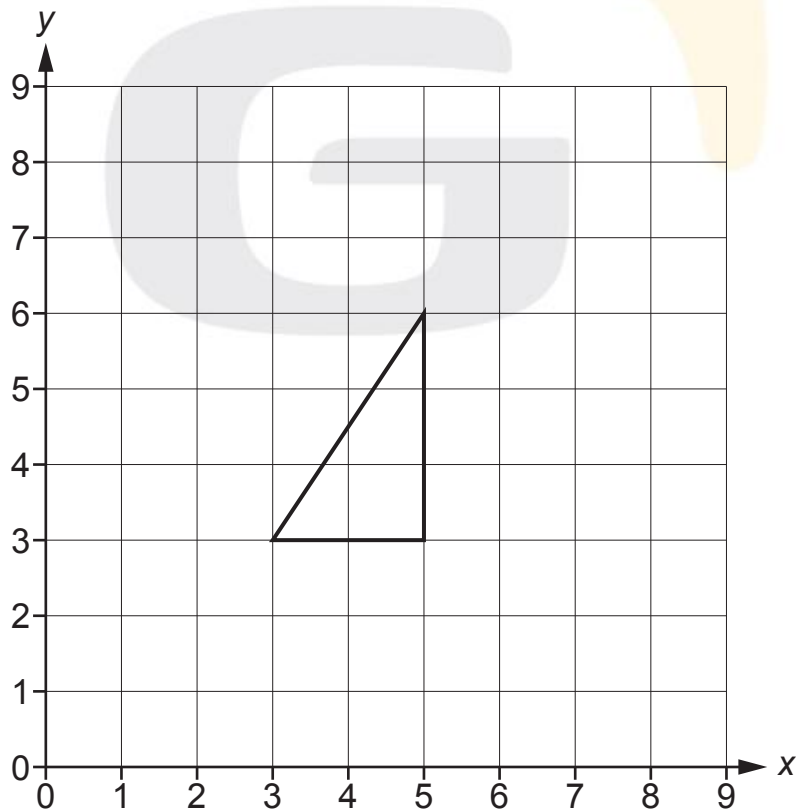
$$22 \times 15$$

$$35 \times 12$$

$$25 \times 15$$

[1]

- 9 Here is a triangle on a co-ordinate grid.



The triangle is translated 3 squares to the right and 1 square down.

Draw the triangle in its new position.

[1]

- 10 Tick (✓) the most likely mass of the baby.



23 g ☐

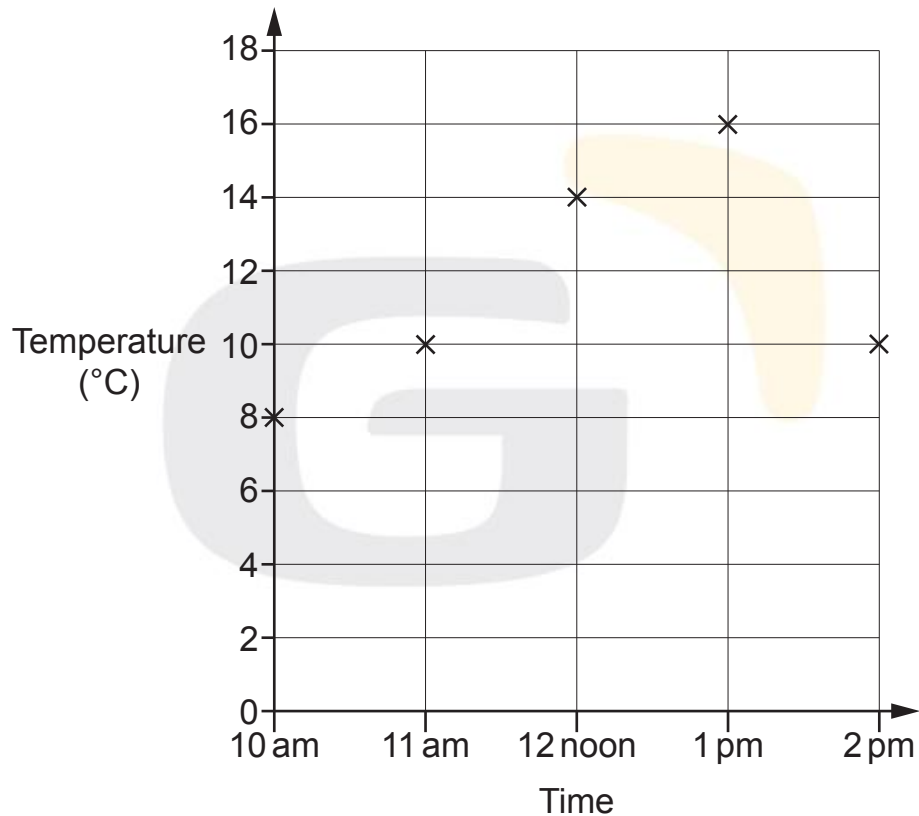
0.23 kg ☐

2.3 kg ☐

233 kg ☐

[1]

- 11 Students in Year 5 keep a record of the playground temperature. They plot their results.



- (a) How many readings are recorded?

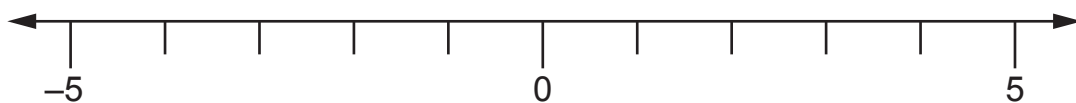
..... [1]

- (b) Use the graph to estimate the temperature at 1:30 pm.

..... °C [1]

12 Draw arrows (\downarrow) to show the positions of -3 and 1.5 on the number line.

For
Teacher's
Use



[1]

13 Here are four numbers.

60 136 306 016 631 600 100 663

Write these numbers in the boxes to make the statement correct.

> > >

[1]

14 Blessy and Pierre each choose a decimal.

They round their decimals to the nearest whole number.

Tick (\checkmark) the box where their whole numbers are the same.

Blessy	2.3
Pierre	3.2

☐

Blessy	3.4
Pierre	4.3

☐

Blessy	4.5
Pierre	5.4

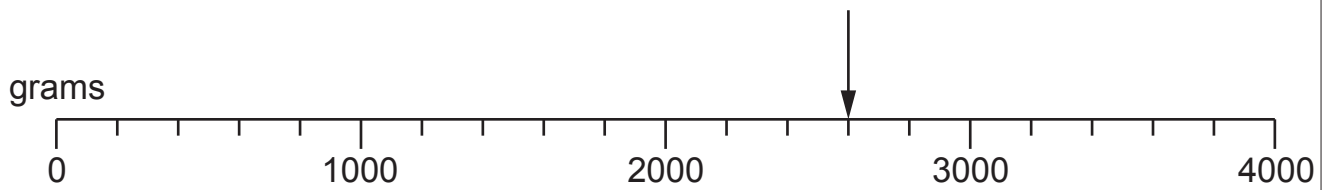
☐

Blessy	5.6
Pierre	6.5

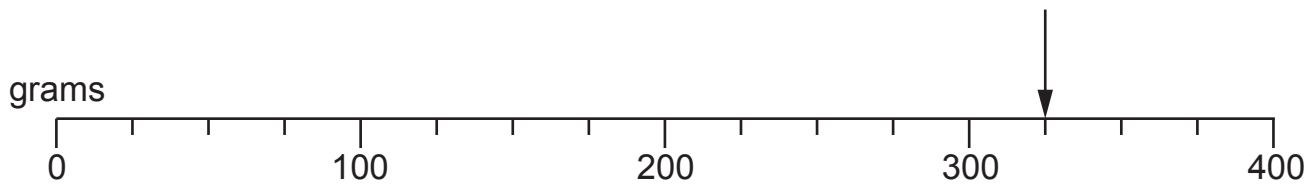
☐

[1]

15 The mass of a watermelon is shown on this scale.



The mass of a potato is shown on this scale.



What is the difference in mass between the watermelon and the potato?
Show your working.

..... grams [2]

16 Use one of these words to complete each sentence.

always sometimes never

Whole numbers ending in five can be divided exactly by 2

Whole numbers ending in zero can be divided exactly by 5

Whole numbers ending in five can be divided exactly by 10

Whole numbers ending in zero can be divided exactly by 100

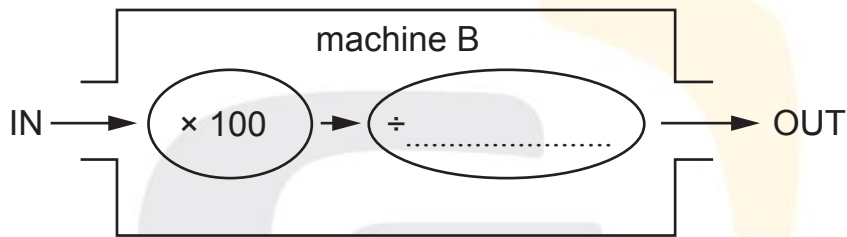
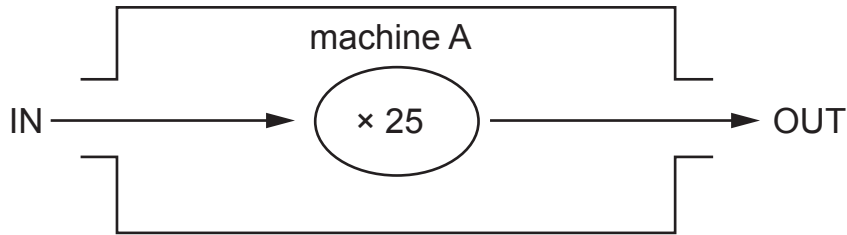
[2]

17 Angelique knows $354 \times 4 = 1416$

Explain how she uses **this fact** to calculate 354×12

.....
 [1]

18 Rajiv makes two function machines, A and B, to give the **same** result.



(a) Complete machine B.

[1]

(b) Calculate 81×25 **using machine B**.
 You must show all your working.

..... [1]

19 Draw a ring around the answer to $27 \div 5$

$$5\frac{1}{5}$$

$$5\frac{2}{5}$$

$$5\frac{3}{5}$$

$$5\frac{4}{5}$$

[1]

- 20** Here is a number sequence.
It continues in the same way.

Write the missing numbers in the boxes.

	,	2,	4,	8,	16,	
--	---	----	----	----	-----	--

[1]

- 21** Here are four measurements.

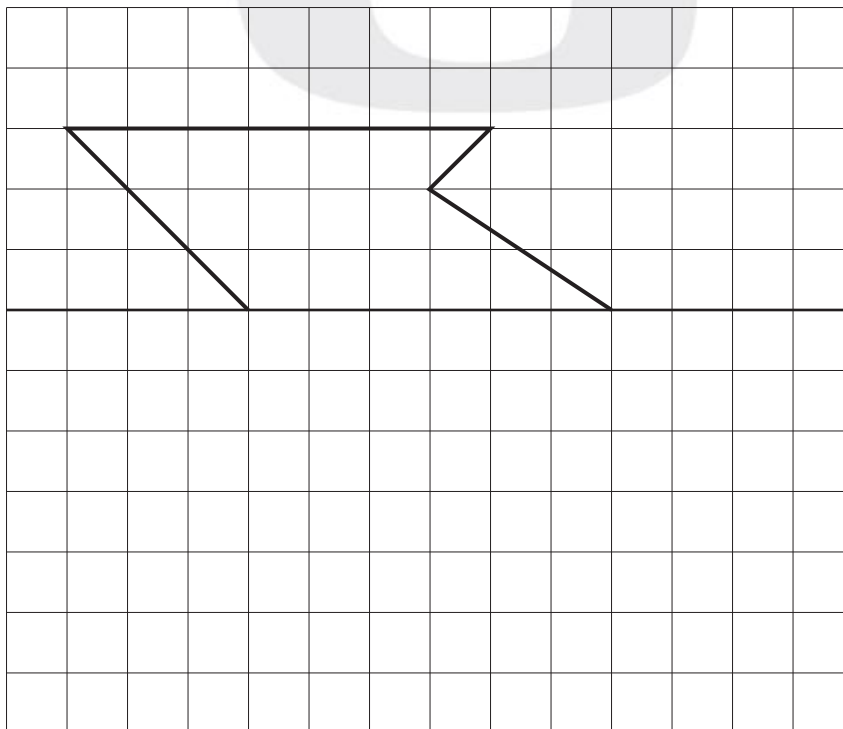
$\frac{1}{2}\text{m}$	8 cm	0.9 m	40 cm
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Write these measurements in order of size from shortest to longest.

..... shortest longest

[1]

- 22** Reflect the shape in the mirror line.



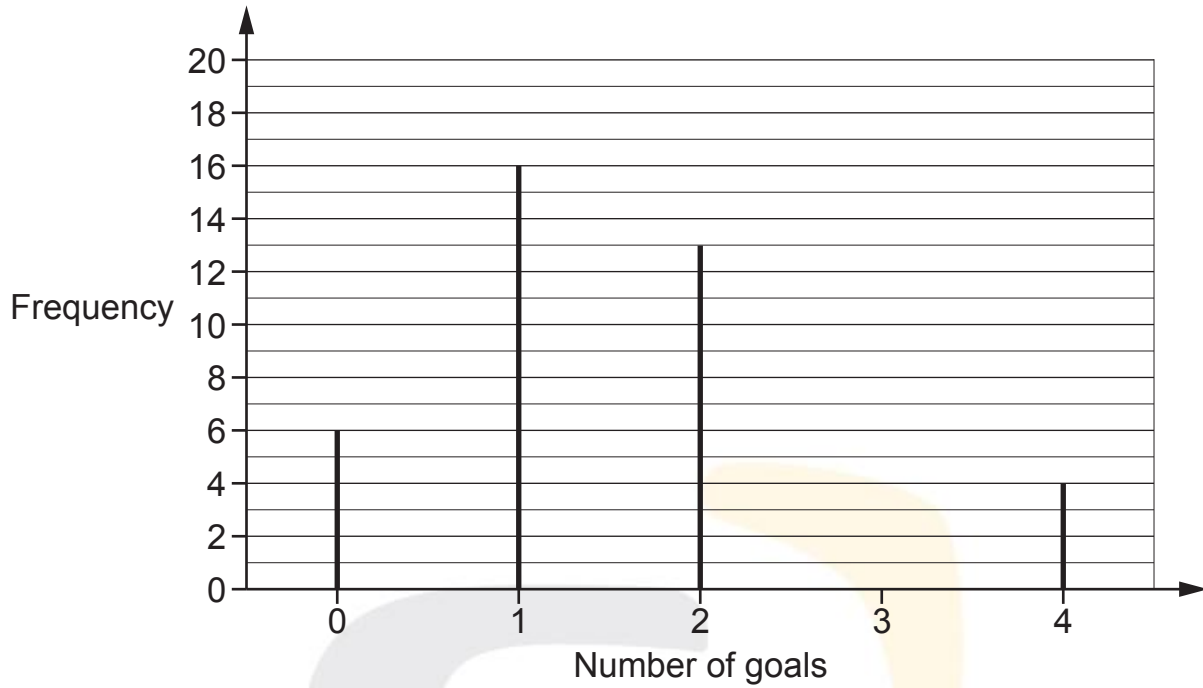
mirror line

[1]

- 23** Gabriella draws a bar line chart for the number of goals scored in 50 football matches.

(a) The bar line for 3 goals scored is missing.

Complete the bar line chart.



[1]

(b) Write down the mode for the number of goals scored.

..... [1]

- 24** A farmer has 419 eggs.
Egg boxes hold 6 eggs.

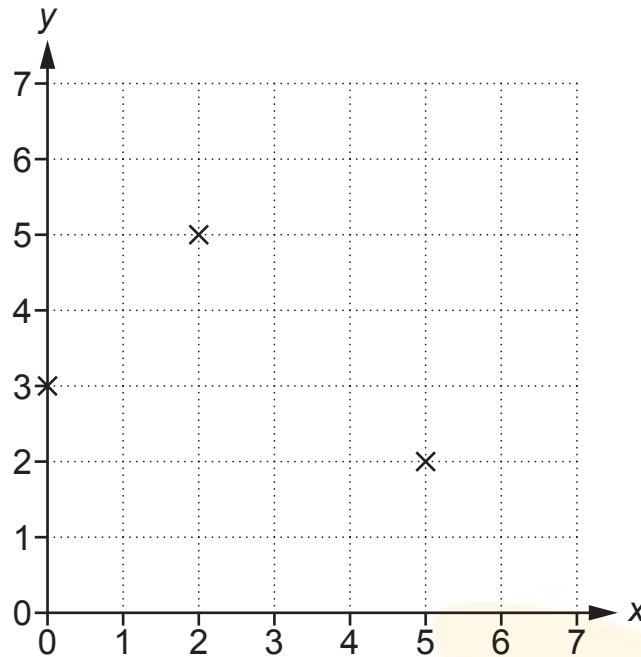


The farmer wants to put all the eggs into boxes.

How many boxes will he need?

..... boxes [1]

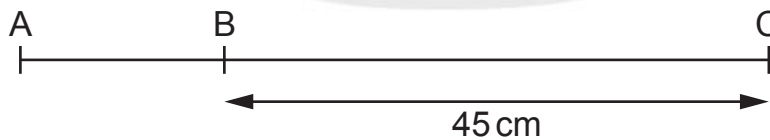
- 25** Anastasia is drawing a rectangle on a co-ordinate grid. She has plotted three of the vertices.



Write the co-ordinates of the fourth vertex.

(..... ,) [1]

- 26** Points A, B and C are marked on a line.
The distance from B to C is 3 times the distance from A to B.
The distance from B to C is 45 cm.



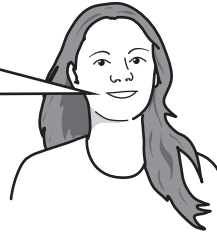
Not drawn
to scale

What is the distance from A to C?

..... cm [1]

27 Mia says,

I am thinking of three odd numbers.
They add up to 40

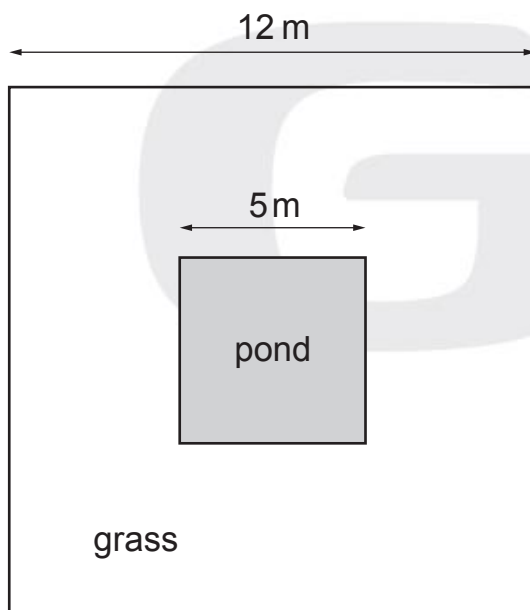


Jamila says that cannot be correct.

Explain how Jamila knows this.

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

28 A square pond is dug in a square of grass.



Not drawn
to scale

Calculate the area of grass that is left.
Show your working.

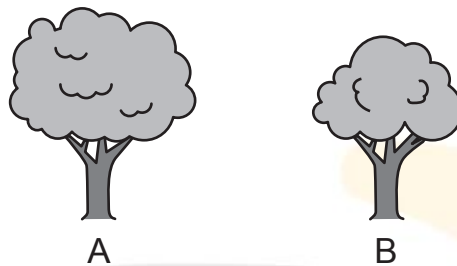
..... m^2 [2]

- 29** Oliver thinks of a square number between 40 and 100
He adds 4 to the number.
The total is a multiple of 5

Which square number did he start with?

..... [1]

- 30** Yuri has two plum trees, A and B, in his garden.



Tree A produces 20 kg of plums.
Tree B produces 10% more than tree A.

How many kilograms of plums in total does Yuri get from the trees?
Show your working.

..... kg [2]