

Please write clearly in block capitals.

Centre number

--	--	--	--	--

Candidate number

--	--	--	--

Surname

Forename(s)

Candidate signature

I declare this is my own work.

INTERNATIONAL GCSE MATHEMATICS CORE

Paper 2C

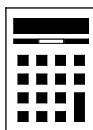
C

Wednesday 18 November 2020 07:00 GMT Time allowed: 1 hour 30 minutes

Materials

For this paper you must have:

- a calculator
- mathematical instruments.



Instructions

- Use black ink or black ball-point pen. Draw diagrams in pencil.
- Fill in the boxes at the top of this page.
- Answer **all** questions.
- You must answer the questions in the spaces provided. Do not write outside the box around each page or on blank pages.
- If you need extra space for your answer(s), use the lined pages at the end of this book. Write the question number against your answer(s).
- Do all rough work in this book. Cross through any work you do not want to be marked.

Information

- The marks for questions are shown in brackets.
- The maximum mark for this paper is 80.
- You may ask for more answer paper, graph paper and tracing paper. These must be tagged securely to this answer book.
- If your calculator does not have a π button, take the value of π to be 3.142

Advice

- Show all necessary working; otherwise marks for method may be lost.

For Examiner's Use

Pages	Mark
2–3	
4–5	
6–7	
8–9	
10–11	
12–13	
14–15	
16–17	
18–19	
20–21	
22–23	
24–25	
26	
TOTAL	



N 0 V 2 0 9 2 6 0 2 C 0 1

1B/M/Nov20/E10

9260/2C

Answer **all** questions in the spaces provided.**1** Simplify $3c + 2d - c + d$

Circle your answer.

[1 mark]

$2c + d$

$2c + 3d$

$4c + d$

$4c + 3d$

2 How many centimetres are equal to 57.601 metres?

Circle your answer.

[1 mark]

5.7601

576.01

5760.1

$57\,601$

3 Circle the inequality that means x is less than or equal to 5**[1 mark]**

$x > 5$

$x \geq 5$

$x < 5$

$x \leq 5$



- 4 Here are seven numbers.

12 16 16 17 18 20 27

Which of the following is the mode?

Circle your answer.

[1 mark]

15

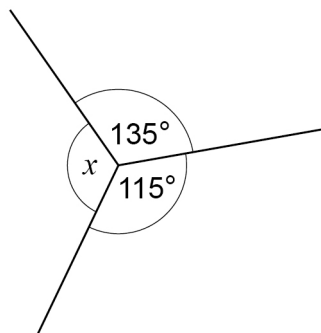
16

17

18

- 5 Three lines meet at a point.

Not drawn
accurately



Work out the size of angle x .

[1 mark]

Answer _____[°]



- 6 Bags of sweets cost \$1.45 each.

Work out the **largest** number of bags that can be bought for \$10

[2 marks]

Answer _____

- 7 Use four **different** factors of 20 to make this calculation correct.

[2 marks]

$$\square + \square = \square + \square$$



- 8 Here is the term-to-term rule for a sequence.

Multiply by 4 and add 7

The first term is $\frac{1}{2}$

Work out the next two terms.

[2 marks]

Answer _____ and _____

- 9 (a) Put one pair of brackets into this calculation to make it correct.

[1 mark]

$$3 + 6 \times 5 + 2 = 45$$

- 9 (b) Put one pair of brackets into this calculation to make it correct.

[1 mark]

$$7 - 1 + 9 \div 3 = 5$$

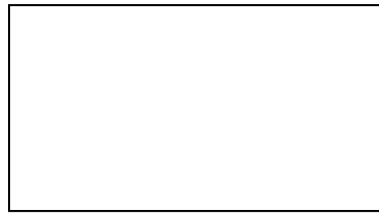


10

Match each shape to the number of lines of symmetry it has.

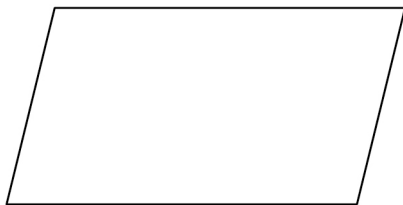
One has been done for you.

[3 marks]



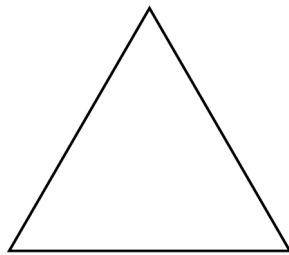
Rectangle

0



Parallelogram

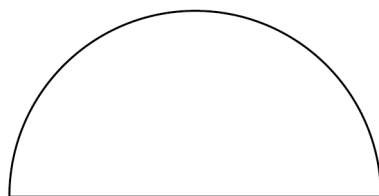
1



Equilateral triangle

2

3



Semicircle

4



- 11** At the bottom of a mountain the temperature is 25°C
At the top of the mountain the temperature is -31°C

- 11 (a)** Work out the difference in temperature between the bottom and top of the mountain.

[2 marks]

Answer _____ $^{\circ}\text{C}$

- 11 (b)** The temperature on the mountain decreases by 8°C for every 1000 m gained in height.
Work out the height of the mountain.

[2 marks]

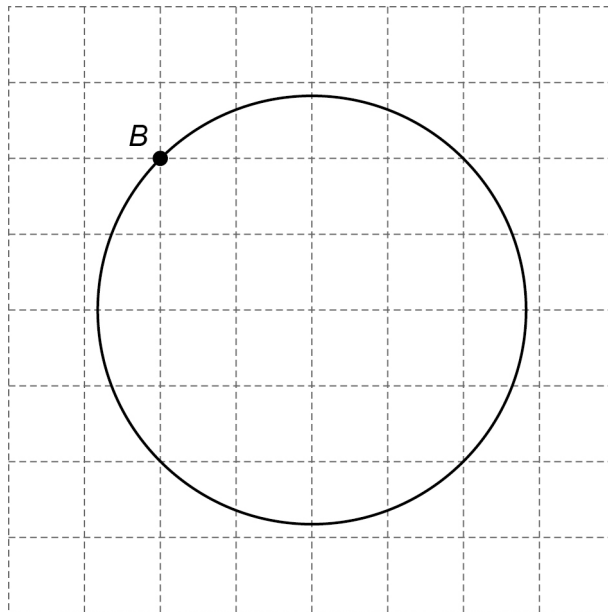
Answer _____ m



12 (a) On the centimetre grid,

draw from B a chord of the circle with length 4 cm

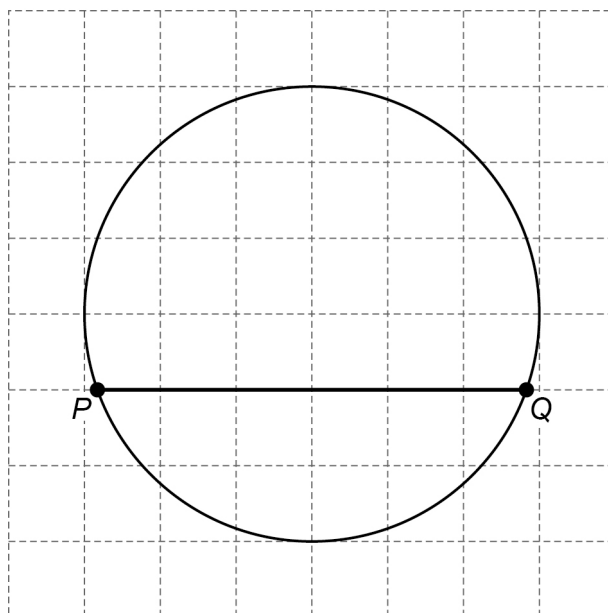
[1 mark]



12 (b) On this grid,

draw a tangent to the circle that is parallel to PQ .

[1 mark]



- 13** Work out the value of $8x + 2y$ when $x = 1.5$ and $y = -7$

[2 marks]

Answer _____

- 14** The diameter of a circle is 10 cm

Work out the circumference.

Circle your answer.

[1 mark]

10π cm

20π cm

25π cm

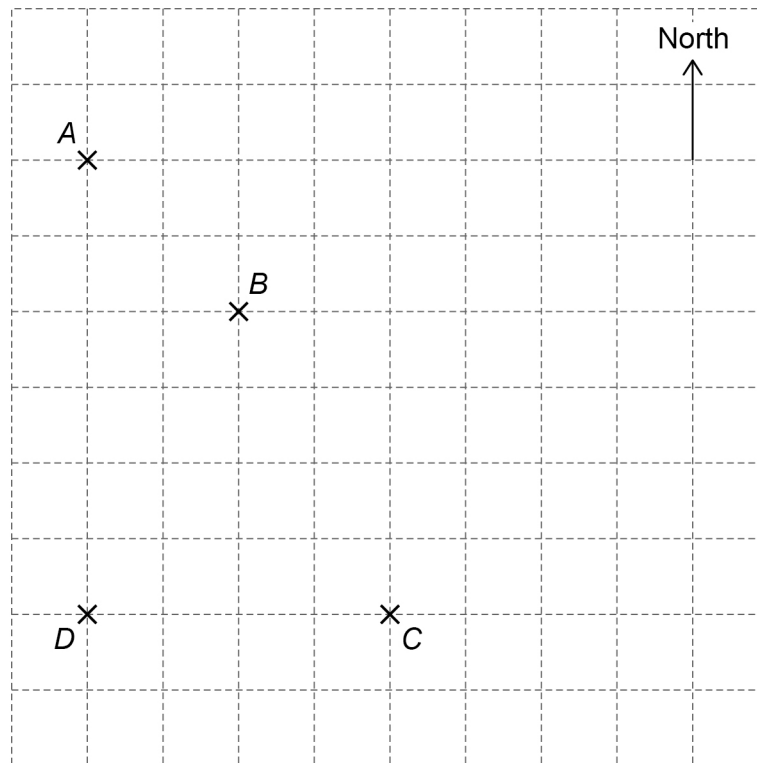
100π cm

Turn over for the next question

Turn over ►



- 15** Here is a map showing four towns, *A*, *B*, *C* and *D*.
It is drawn to scale on a square grid.



- 15 (a)** Circle the direction of *B* from *A*.

[1 mark]

North West

North East

South West

South East



15 (b) The actual distance of D from A is 54 km

Work out the actual distance of C from D .

[2 marks]

Answer _____ km

15 (c) E is a different town.

The bearing of E from B is 090°

The bearing of E from C is 045°

Mark the position of E on the diagram.

[2 marks]

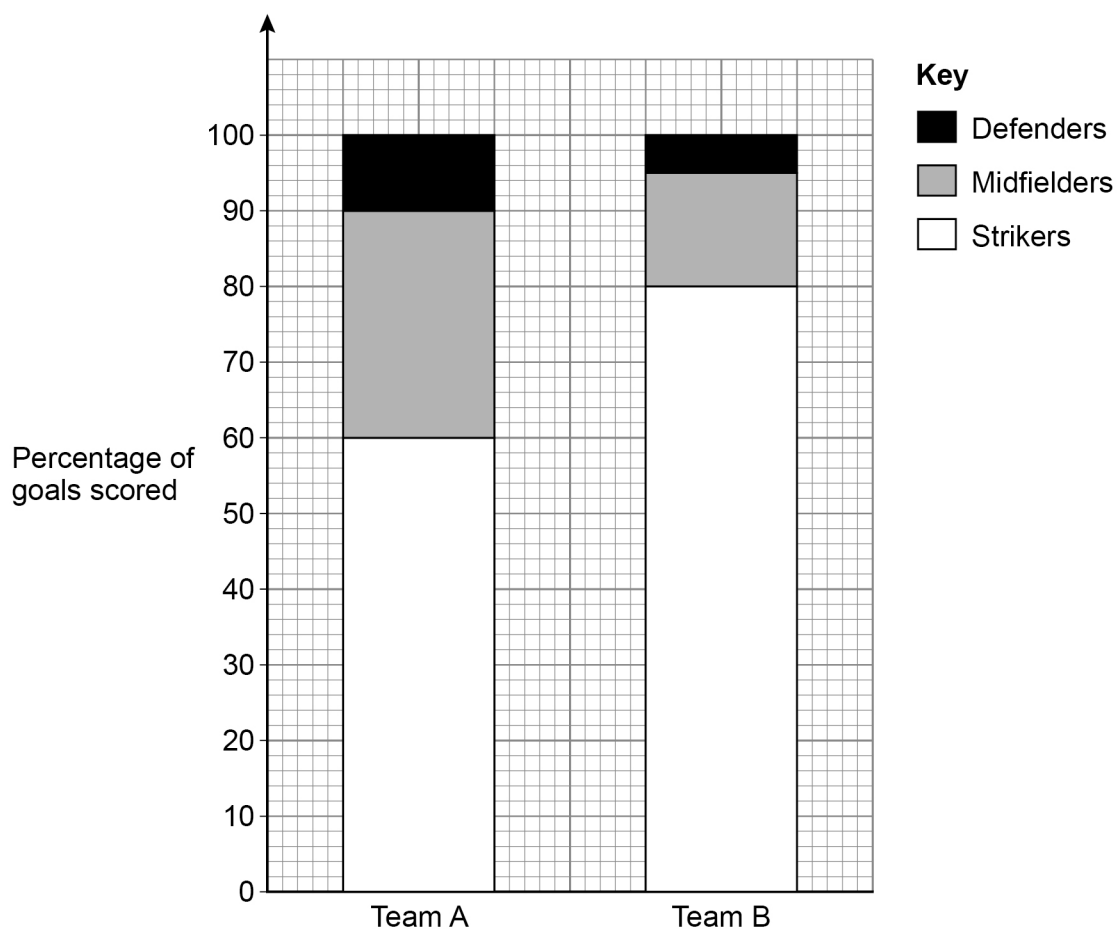
Turn over for the next question

Turn over ►



16

Two football teams, A and B, played the same number of games.
For these teams, the position of the player who scored each goal was recorded.
The chart shows the **percentage** of goals scored by players in each position.



16 (a) For Team A, what percentage of goals were scored by midfielders?

[1 mark]

Answer _____ %



16 (b) Team B scored 120 goals.

How many were scored by strikers?

[2 marks]

Answer _____

16 (c) Vic says,

“The strikers from Team B scored more goals than the strikers from Team A.”

Give a reason why he may **not** be correct.

[1 mark]

Turn over for the next question

Turn over ►



- 17 (a)** Work out as a decimal $\frac{\sqrt{15.21} + 9.828}{1.6^2}$

[2 marks]

Answer _____

- 17 (b)** Round your answer to part (a) to 2 significant figures.

[1 mark]

Answer _____

- 18** Craig and Anton share \$180 in the ratio 1 : 2
Craig spends $\frac{1}{5}$ of his share and saves the rest.

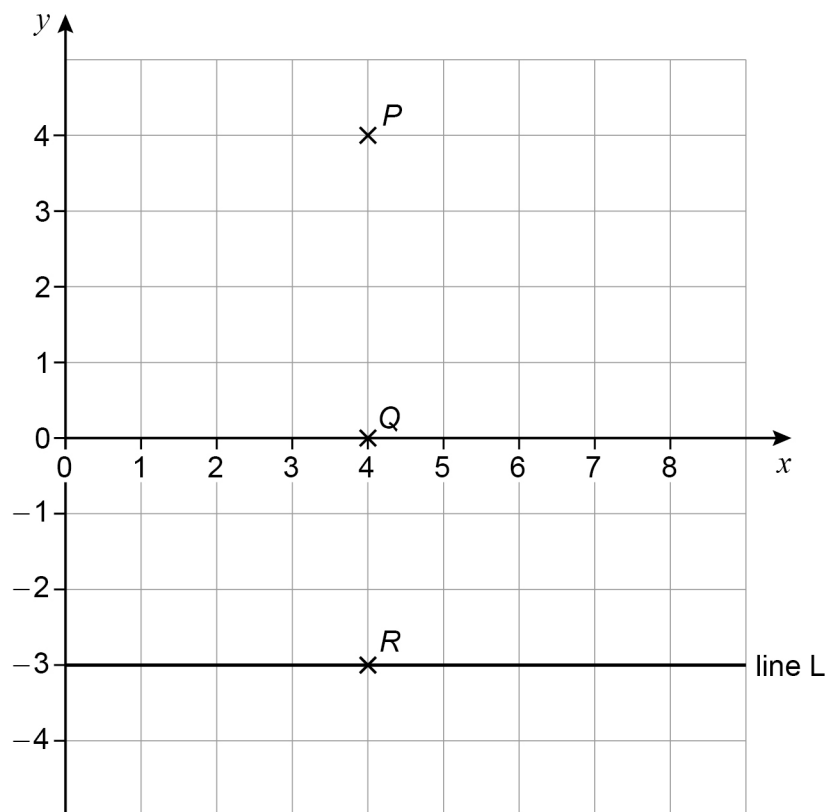
How much does Craig save?

[3 marks]

Answer \$ _____



19

The grid shows points P , Q and R . A and B are points on line L .

$$AR = QR$$

$$AB = PR$$

Work out a possible set of coordinates for A and B .**[2 marks]**
 A (_____ , _____) B (_____ , _____)


20

Adam and Samir are taxi drivers.

The stem-and-leaf diagrams show the distance they each travel on 30 days.

Key: 16 | 2 represents 162 miles

Adam					
15	0	1	1	4	
16	2	3	6	9	9
17	1	1	5	5	
18	2	2	4	6	9
19	0	0	1		
20	3	4	5	6	
21	1	1	8	9	
22	6				

Samir					
15	9				
16	0				
17	2	7	7		
18	0	1	5	6	8
19	2	2	4	7	7
20	3	3	4	9	9
21	1	2	3	5	7
22	2	3	4		

20 (a) Complete this table.**[3 marks]**

	Range	Median
Adam	76	
Samir		197



- 20 (b)** Which taxi driver travelled a more consistent distance each day?
Give a reason for your answer.

[1 mark]

- 21** 250 people choose to learn drawing, painting or sewing.
There are equal numbers of adults and children.
95 people choose painting, of which 53 are adults.
28 children choose sewing.

What percentage of the children choose drawing?

[4 marks]

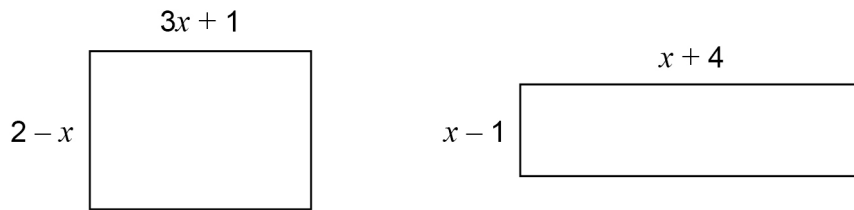
Answer _____ %



22

The lengths and widths, in centimetres, of two rectangles are shown.

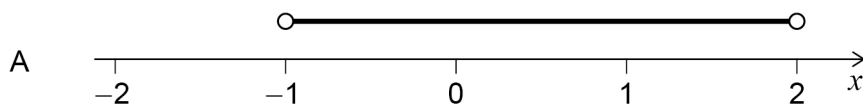
Not drawn
accurately



22 (a) Which diagram represents the possible values of x ?

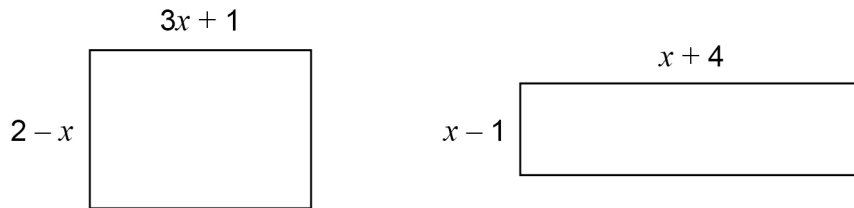
Circle the correct letter.

[1 mark]



22 (b) Show that the **perimeters** of the rectangles are equal.

Not drawn
accurately



[3 marks]

Turn over for the next question

Turn over ►



- 23** ξ is the set of single-digit positive numbers.
A is the set of square numbers.
B is the set of odd numbers.
C is the set of numbers less than 5

- 23 (a)** List the elements of A'

[1 mark]

Answer _____

- 23 (b)** List the elements of $B \cup C$

[1 mark]

Answer _____



24

Sally runs a 400-metre race.

For the first 315 metres her average speed is 7 m/s

For the remainder of the race her average speed is $8\frac{1}{3}$ m/s

Work out Sally's time for the race.

[3 marks]

Answer _____ seconds

25Circle the pair of values of x for which $(x + 1)(3x - 2) = 0$ **[1 mark]**

$-1 \text{ and } \frac{2}{3}$

$-1 \text{ and } -\frac{3}{2}$

$1 \text{ and } -\frac{3}{2}$

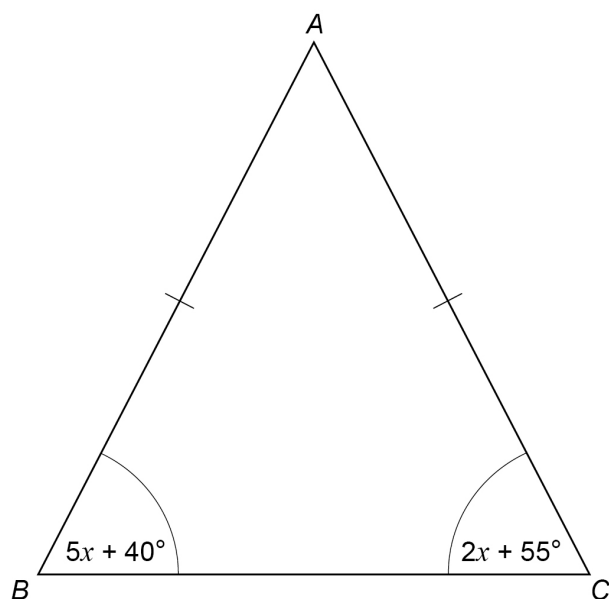
$1 \text{ and } -\frac{2}{3}$

Turn over ►

26

 ABC is an isosceles triangle.

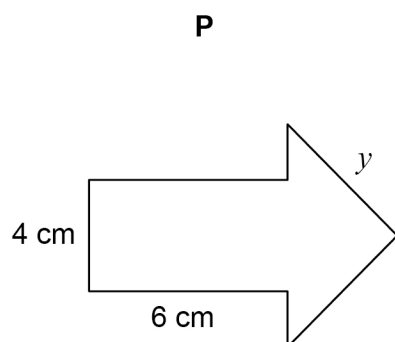
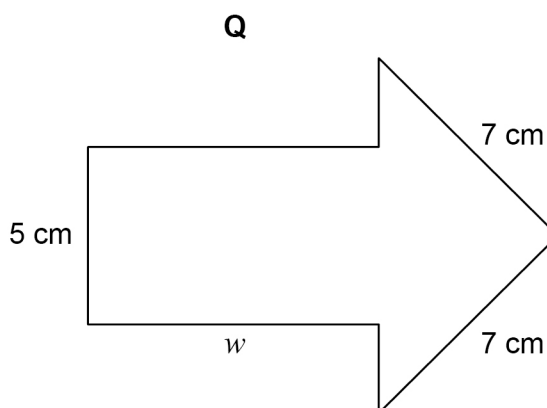
$AB = AC$

Not drawn
accuratelyWork out the size of angle BAC .**[5 marks]**

Answer _____^o

27

Shape Q is an enlargement of shape P.

Not drawn
accuratelyWork out the values of w and y .**[3 marks]**

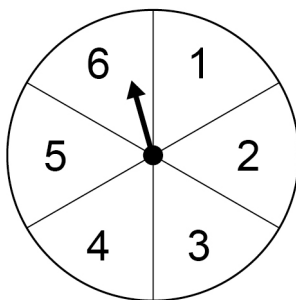
 $w =$ _____ cm $y =$ _____ cm

Turn over for the next question

Turn over ►



- 28 (a) A fair spinner has 6 equal sections.



Here are the results of 8 spins.

5 2 1 4 3 5 5 5

Write down the probability that the next spin is a 5

[1 mark]

Answer _____

- 28 (b) Xin is going to toss a fair coin 50 times.

She says,

“I will definitely get 25 heads and 25 tails.”

Give a reason why she is **not** correct.

[1 mark]



29 (a) Simplify $y^2 \times y^5$

[1 mark]

Answer _____

29 (b) Simplify $y^9 \div y^4$

[1 mark]

Answer _____

30 Simplify fully $\frac{11x}{12} - \left(\frac{x}{3} + \frac{x}{2}\right)$

[3 marks]

Answer _____

7

Turn over ►



- 31** John sells cars.
Last year
he sold 30 red cars
the relative frequency of a car he sold being red was 0.15

- 31 (a)** Show that he sold 200 cars in total last year.

[1 mark]

- 31 (b)** The table shows information about the 200 cars John sold last year.

	Red	Black	Silver	White
Number of cars	30	$n + 50$	$3n$	$2n$

Work out the relative frequency of a car he sold being white.

[4 marks]

Answer _____

END OF QUESTIONS



There are no questions printed on this page

*Do not write
outside the
box*

**DO NOT WRITE ON THIS PAGE
ANSWER IN THE SPACES PROVIDED**



*Do not write
outside the
box*

[illegible]

*Do not write
outside the
box*

[illegible]

[illegible]

*Do not write
outside the
box*

[illegible]

There are no questions printed on this page

*Do not write
outside the
box*

**DO NOT WRITE ON THIS PAGE
ANSWER IN THE SPACES PROVIDED**

Copyright information

For confidentiality purposes, all acknowledgements of third-party copyright material are published in a separate booklet. This booklet is published after each live examination series and is available for free download from www.oxfordaqaexams.org.uk.

Permission to reproduce all copyright material has been applied for. In some cases, efforts to contact copyright-holders may have been unsuccessful and Oxford International AQA Examinations will be happy to rectify any omissions of acknowledgements. If you have any queries please contact the Copyright Team.

Copyright © 2020 Oxford International AQA Examinations and its licensors. All rights reserved.

