OXFORD

INTERNATIONAL
AQA EXAMINATIONS

Please write clearly in block capitals.

Centre number | | | | | | Candidate number | | | | |

Surname _____

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Candidate signature _____

I declare this is my own work.

INTERNATIONAL GCSE

MATHEMATICS CORE

C

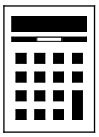
Paper 1C

Monday 8 May 2023 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	
TOTAL	

Do not write outside the box

Answer **all** questions in the spaces provided.

1 Circle the answer to $\sqrt{144 \times 9}$

[1 mark]

36 108 432 648

2 Circle the value of x^4 when $x = -2$

[1 mark]

-16 -8 8 16

3 Here are some numbers.

2	5	8	8	10	11	11	11	15

Circle the mode.

[1 mark]

8 10 11 13

Do not write outside the box

4 An ordinary fair dice is rolled.

Which of these is **most likely**?

Tick **one** box.

[1 mark]

Rolling a number less than 3 ☐

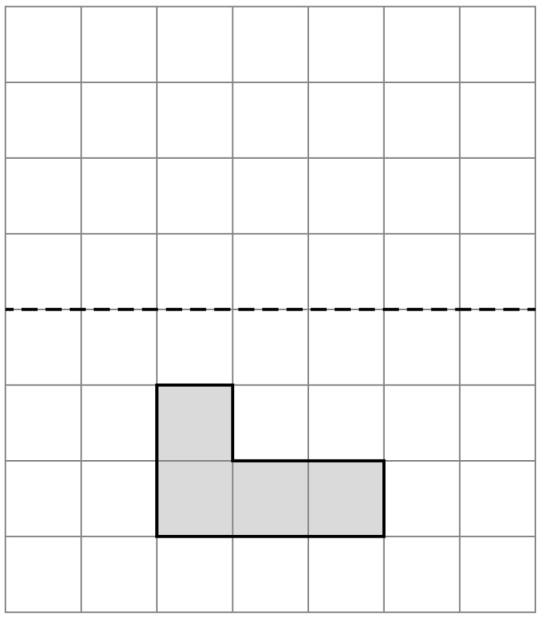
Rolling an odd number ☐

Rolling a 0 ☐

Rolling a 6 ☐

5 Reflect the shape in the mirror line.

[2 marks]



6

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6 A shop sells packs of shirts.

Pack of 2	$19
Pack of 3	$26

6 (a) Work out the **lowest** possible cost of 8 shirts.

[2 marks]

Answer $ _____

6 (b) One week, the shop has a special offer.

Buy a pack of 3 and get a pack of 2 for half price

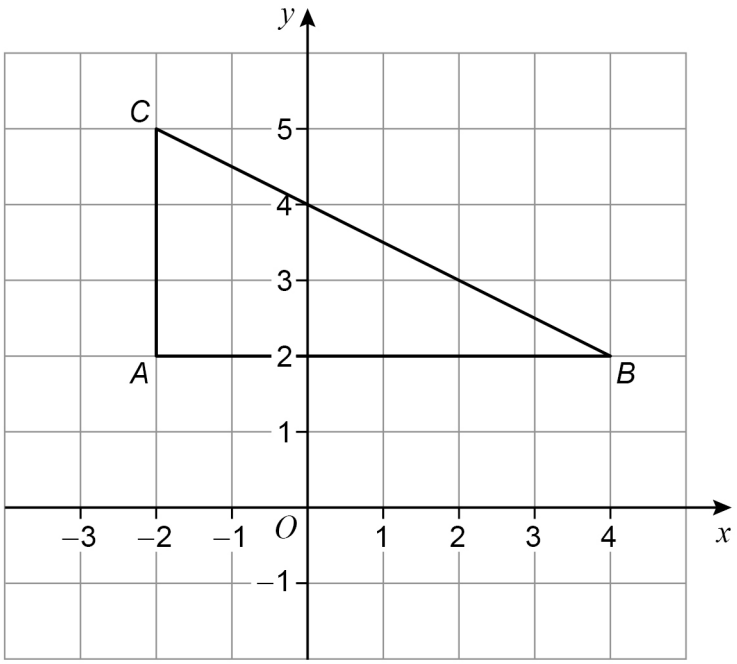
Work out the **total** cost of 5 shirts using the special offer.

[2 marks]

Answer $ _____

Do not write outside the box

7 Triangle *ABC* is shown.



7 (a) Write down the coordinates of *C*.

[1 mark]

Answer (_____ , _____)

7 (b) Write down the coordinates of the midpoint of *AB*.

[2 marks]

Answer (_____ , _____)

7

Turn over ►

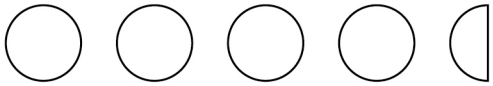
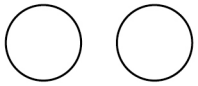
Do not write outside the box

8 A quiz had 30 questions.

8 (a) Sara took part in the quiz.

The pictogram shows information about her results.

The key is missing.

Correct	
Incorrect	
Not answered	

How many of the 30 questions were **not answered**?

[3 marks]

Answer _____

Do not write outside the box

8 (b) Luis also took part in the quiz.

Here are his results.

Correct	9
Incorrect	6
Not answered	15

He scores

5 points for a correct answer

−1 point for an incorrect answer

0 points for a question not answered.

Work out his **total** score.

[3 marks]

Answer _____

Turn over for the next question

6

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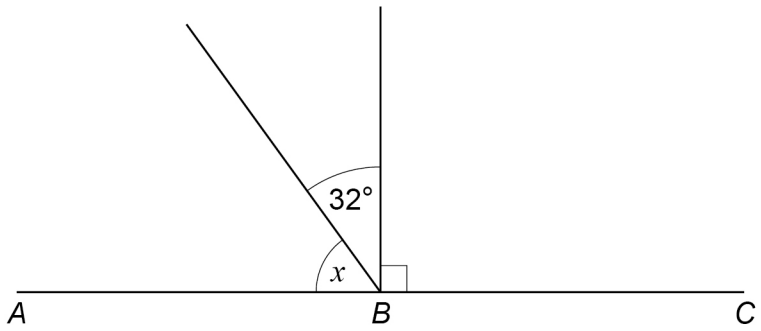
9 (a) *ABC* is a straight line.



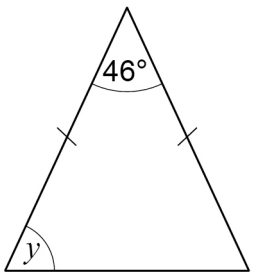
Not drawn accurately

Work out the size of angle x.

[2 marks]

$x =$ _____ °

9 (b) Here is an isosceles triangle.



Not drawn accurately

Work out the size of angle y.

[2 marks]

$y =$ _____ °

Do not write outside the box

10 Jas saves coins.

Each coin is worth 5 cents, 25 cents or 50 cents.

He sorts them into three bags.

There are the same number of coins in each bag.

The **total value** of all the coins is $12

How many coins are in each bag?

[3 marks]

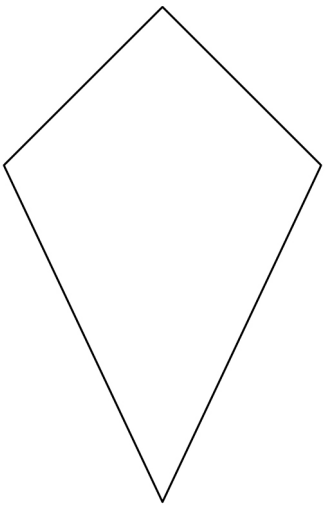
Answer _____

7

Turn over ►

Do not write outside the box

11 Here is a kite.



Tick a box for each statement about a kite.

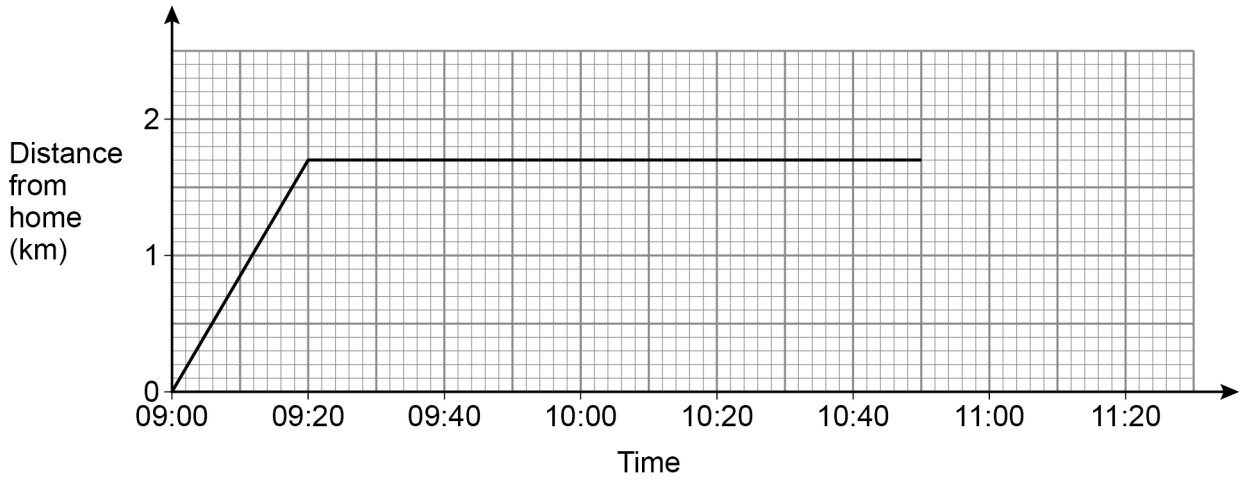
[2 marks]

	True	**False**
It has exactly 2 lines of symmetry	☐	☐
It has rotational symmetry of order 2	☐	☐
The diagonals intersect at 90°	☐	☐

Do not write outside the box

12 Jiao walked from her home to visit the library.

Here is part of her distance-time graph.



12 (a) She left the library at 10:50

For how long was she at the library?

[1 mark]

Answer _____

12 (b) Jiao walked home at a constant speed using the same route.

It took her 6 minutes **longer** than her journey to the library.

Complete her distance-time graph.

[2 marks]

5

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13 On Saturday, Rashid works for

5 hours in a shop

and

4 hours as a chef.

He is paid $13.20 per hour in the shop.

His **total** pay on Saturday is $140

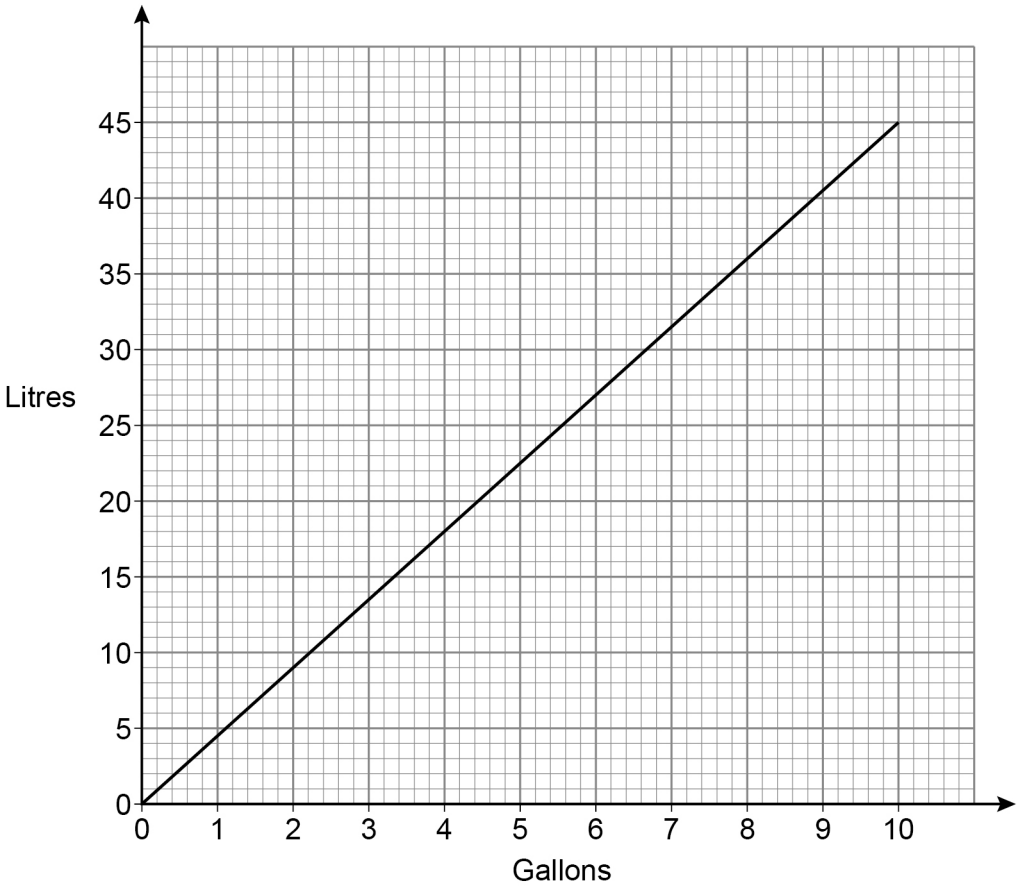
How much is he paid per hour as a chef?

[4 marks]

Answer $ _____

Do not write outside the box

14 Here is a graph for converting gallons to litres.



Convert 250 gallons to litres.

Use the graph to help you.

[3 marks]

Answer _____ litres

7

Turn over ►

Do not write outside the box

15 The mean of four **different** numbers is 8

Work out a possible set of four numbers.

[2 marks]

Answer _____ _____ _____ _____

16 (a) Simplify fully $3a + 2a + b \times b$

[2 marks]

Answer _____

Do not write outside the box

16 (b) Simplify fully $\dfrac{8c-20}{4}$

[2 marks]

Answer _____

16 (c) Solve $10(d-2)=21$

[3 marks]

$d =$ _____

Turn over for the next question

9

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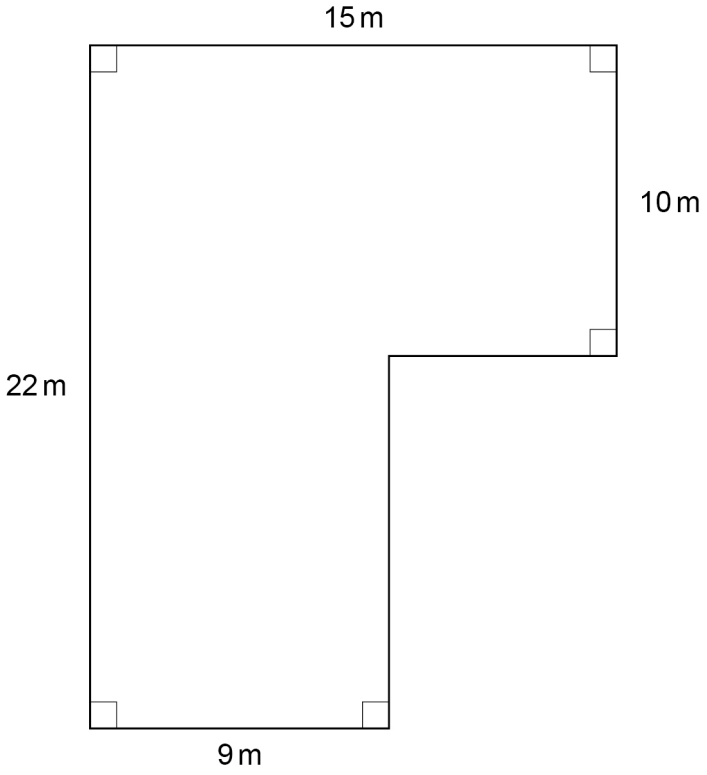
17 Here is a diagram of Maria's garden.



Not drawn accurately

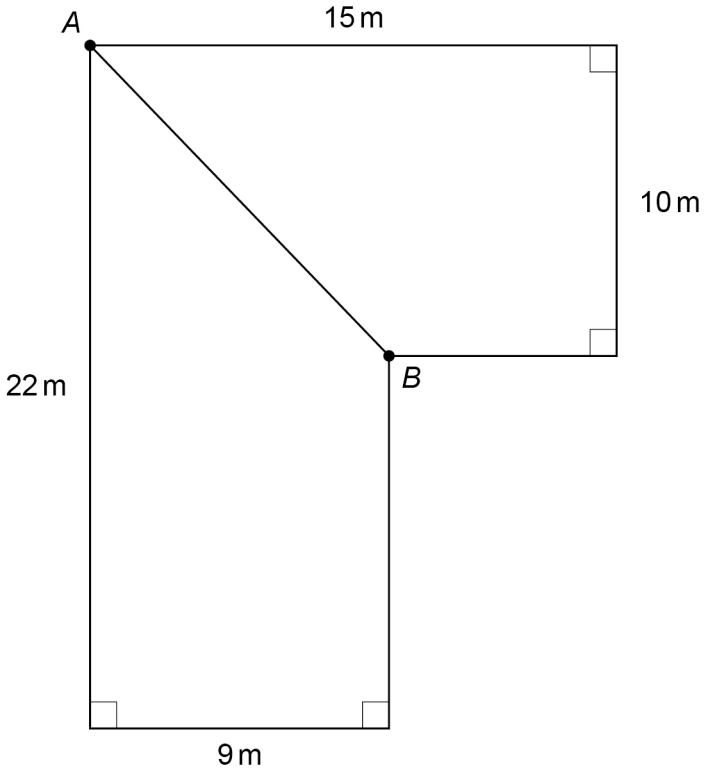
17 (a) Work out the area of the garden.

[2 marks]

Answer _____ m^2

Do not write outside the box

17 (b) Maria wants her washing line to reach from point *A* to point *B*.



Not drawn accurately

Her washing line is 13 m long.

Use Pythagoras' theorem to work out if her washing line is long enough.

You **must** show your working.

[3 marks]

5

Turn over ►

Do not write outside the box

18 a and c are numbers.

24 is $\frac{1}{3}$ of a

c is $\frac{5}{4}$ of a

Work out c.

[3 marks]

$c =$ _____

19 Circle the reciprocal of x.

[1 mark]

$-x$ $\quad$ $1 - x$ $\quad$ $\frac{1}{x}$ $\quad$ $\sqrt{x}$

Do not write outside the box

20 Work out 100 as a percentage of 20

Circle your answer.

[1 mark]

20% 80% 400% 500%

21 Here are the first three terms of a linear sequence.

$\frac{1}{2}$ $\frac{5}{2}$ $\frac{9}{2}$

Circle an expression for the nth term.

[1 mark]

$n - \frac{1}{2}$ $n + 2$ $2n - \frac{3}{2}$ $2n + \frac{1}{2}$

22 The number of people at a concert is 600 to the nearest 50

Circle the maximum possible number of people.

[1 mark]

624 625 649 650

7

Do not write outside the box

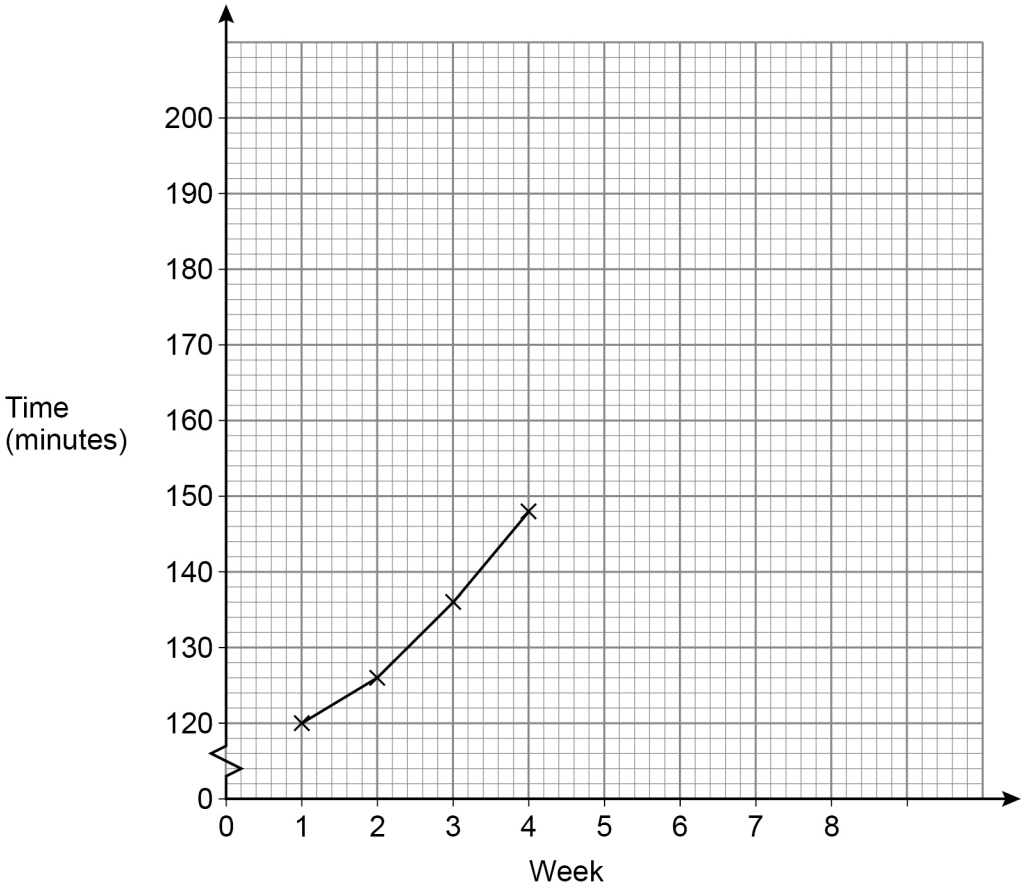
23 Laura joined a running club.

The table shows the time she spent running for the first eight weeks.

Week	1	2	3	4	5	6	7	8
Time (minutes)	120	126	136	148	156	170	176	180

A time-series graph is drawn to represent the data.

The first four points have been plotted.



23 (a) Complete the graph.

[2 marks]

23 (b) Use the graph to estimate the time Laura spent running in week 9

[1 mark]

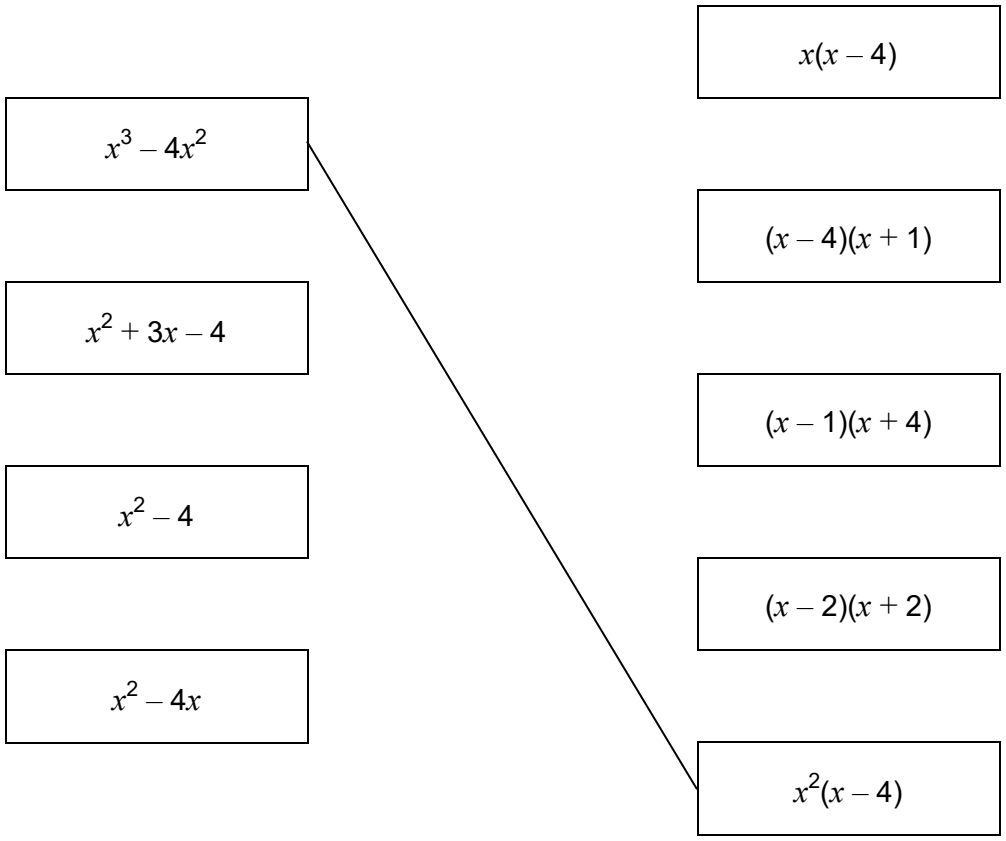
Answer _____ minutes

Do not write outside the box

24 Match each expression to its factorised form.

One has been done for you.

[3 marks]



Turn over for the next question

6

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25 (a) Work out $(9.6 \times 10^{12}) \div (8 \times 10^{7})$

Give your answer in standard form.

[2 marks]

Answer _____

25 (b) Write these numbers in order of size.

Start with the smallest.

8.5×10^{-4} 3.9×10^{-4} 6.2×10^{-5}

[2 marks]

smallest _____

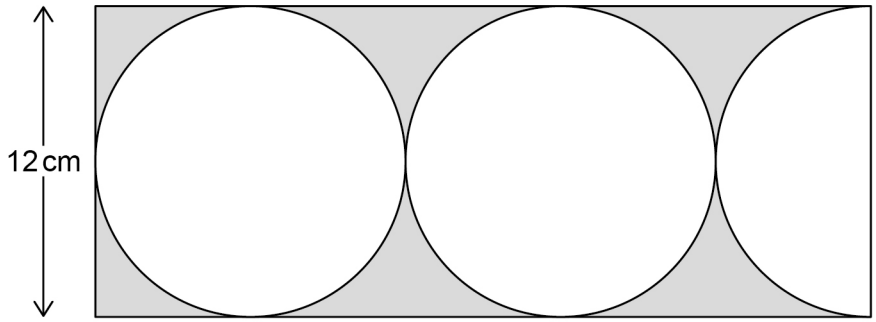
_____

largest _____

Do not write outside the box

26 Two circles and one semicircle just fit in a rectangle as shown.

Not drawn accurately



Work out the shaded area.

[4 marks]

Answer _____ cm^2

Turn over for the next question

8

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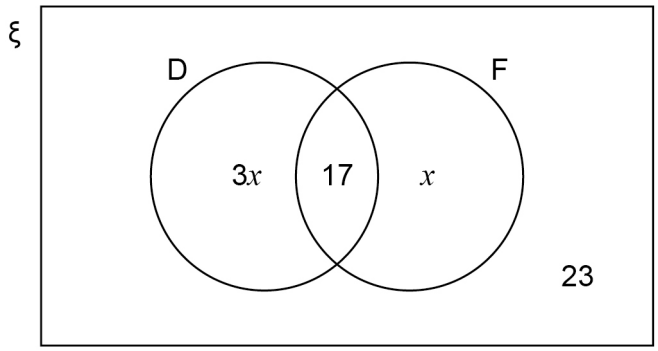
27 Here is a Venn diagram.

ξ = 100 students who visited a cafe

D = students who bought a drink

F = students who bought food



One of the students is chosen at random.

Work out the probability that the student bought a drink.

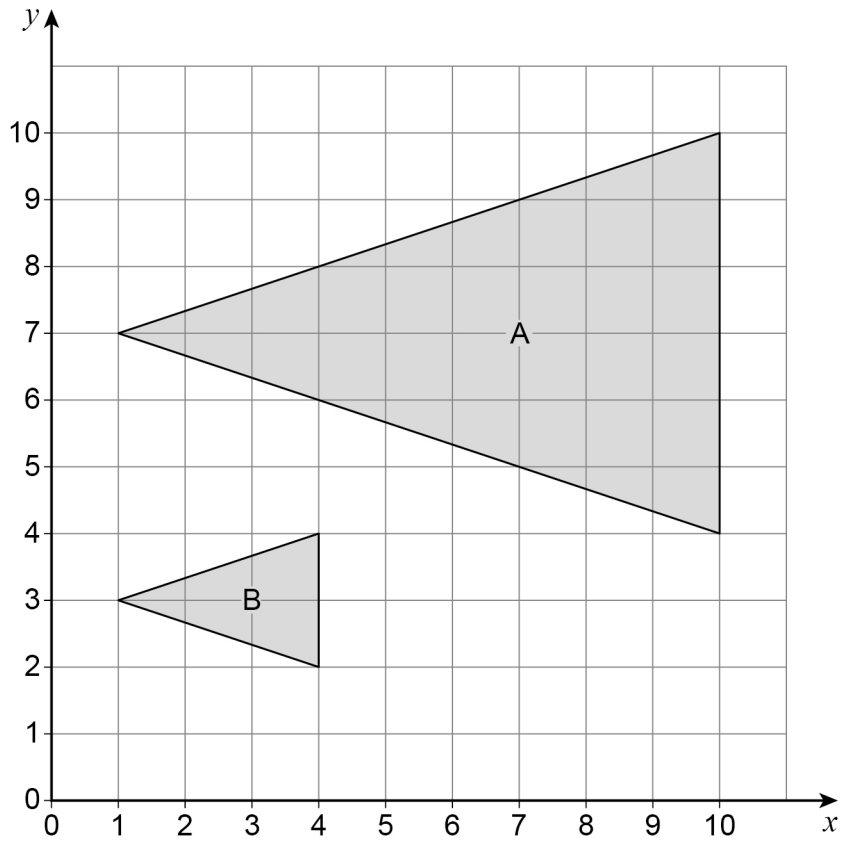
Give your answer as a decimal.

[4 marks]

Answer _____

Do not write outside the box

28 Describe fully the **single** transformation that maps triangle A to triangle B.



[3 marks]

END OF QUESTIONS

7

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ANSWER IN THE SPACES PROVIDED

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Question number	**Additional page, if required.** **Write the question numbers in the left-hand margin.**

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