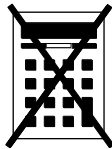# AQA

Functional Skills Level 2
MATHEMATICS

Paper 1 Non-Calculator

Time allowed: 30 minutes

Materials
For this paper you must have:
• mathematical instruments.
You must **not** use a calculator.

Instructions
• Use black ink or black ball-point pen. Draw diagrams in pencil.
• 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.
• State the units of your answer where appropriate.

Information
• The marks for questions are shown in brackets.
• The maximum mark for this paper is 20.
• You may ask for more answer paper, graph paper and tracing paper. These must be tagged securely to this answer book.

Advice
In all calculations, show clearly how you work out your answer.

For Examiner's Use	
Question	Mark
1–5	
6	
TOTAL	

Section A

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

1 Circle the ratio equal to   9 : 2

[1 mark]

$\frac{2}{9}$: 1   4.5 : 1   4.5 : $\frac{2}{9}$ 1 : 4.5
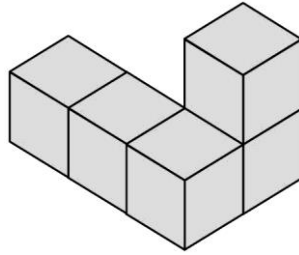
2 Write the number   3 490 200   in words.

[1 mark]

_____

_____
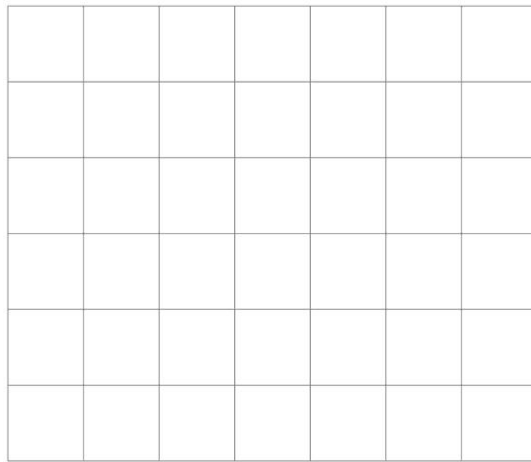
3   Here is a solid made from centimetre cubes.

On the centimetre square grid, draw a plan view of the solid.

[1 mark]

Turn over for the next question

Turn over ▶

4   Work out $3.86 + 0.013 \times 5$

[2 marks]

Answer _____

5   Which is greater, $3\dfrac{2}{9}$ or $\dfrac{13}{4}$?

You **must** show your working.

[3 marks]

Answer _____

Section B

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

6   **Toy cars**

Max has made a straight race track for his toy cars on a floor.

6 (a)   The grid represents the floor.
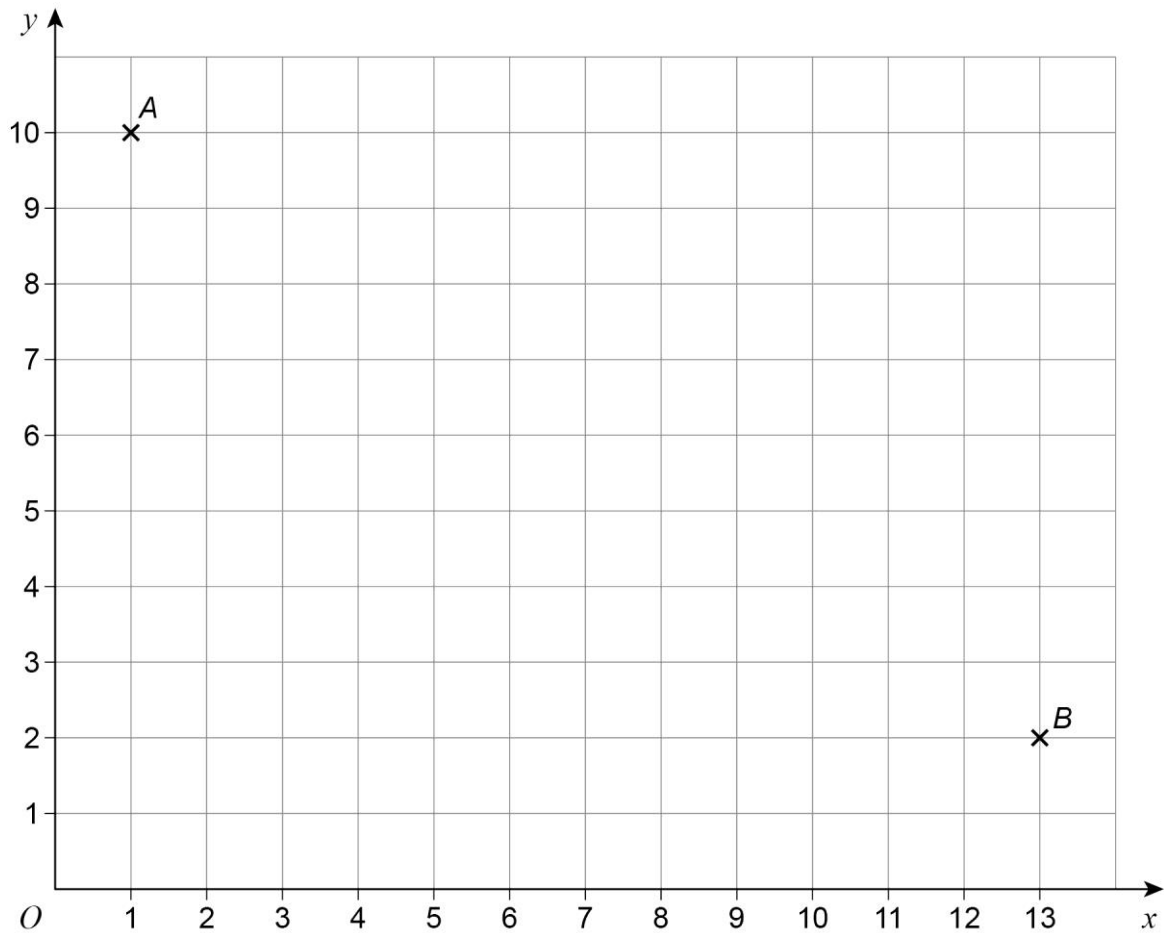
The straight track starts at *A* (1, 10) and finishes at *B* (13, 2).

There is a flag at the **halfway point** of the track.

Work out the coordinates of the flag.

[3 marks]

_____

_____

Answer   (_____ , _____)

Turn over ▶

6 (b) Max wants to compare the performance of two cars, P and Q.

Each car does four timed races on the track.

For car P,

mean = 9.3 seconds

range = 3.8 seconds

The table shows the results for car Q.

	Race 1	**Race 2**	**Race 3**	**Race 4**
Time, seconds	10.15	8.35	7.8	12.1

Compare the average time and consistency of the two cars.

You **must** show your working.

[5 marks]

Average time _____

_____

_____

_____

_____

Consistency _____

_____

_____

_____

6 (c) Max needs to buy batteries for the cars.

There are two packs to choose from.

Pack A	Pack B
£5.60	£6.30
8 batteries	10 batteries
each battery lasts $3\frac{1}{2}$ hours	each battery lasts 3 hours

Which pack is better value for money, A or B?

You **must** show your working.

[4 marks]

Answer _____

END OF QUESTIONS

12

There are no questions printed on this page

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

There are no questions printed on this page

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

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

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

Do not write outside the box

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