Quest

Quest Assessments

Maths familiarisation materials

Quest Familiarisation Materials - Maths

Sample questions

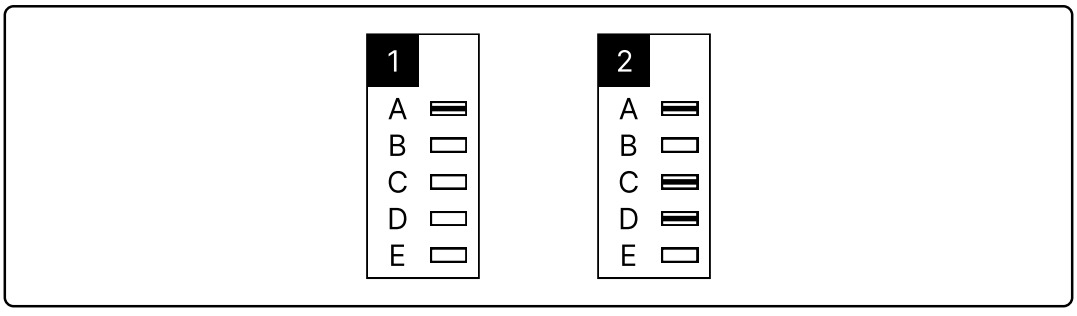
In this document you will find some sample questions for a Maths Quest assessment. These are designed to help you understand what the questions in your exam might look like and how to approach them. These questions will not appear in your real assessment.

Each school's assessment will be slightly different, but these examples will help you become familiar with the types of questions you could see.

Answer sheet

In your Quest assessment, you will record your answers on a special answer sheet called an OMR. You can see an example of an OMR answer sheet on **page 12**, and you can practise filling it in using your answers to the sample questions.

Choose your answers by drawing a line clearly through the rectangle with a pencil. See below for examples of how to fill in your answer sheet correctly.



If you make a mistake, rub it out and choose another answer!

Answer key

The answers to the familiarisation questions can be found on **page 13**. You can use them to check your work after completing the sample questions.

Maths

Familiarisation

Assessment duration: 20 minutes

Make sure you have: pencil and rubber, answer sheet

Instructions

You are about to do an assessment in Maths.

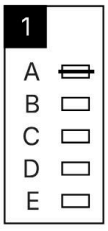
You have **20 minutes** to answer **20 questions**.

If you are stuck on a question, move on to the next one. If you have spare time at the end of the test, go back to any questions you skipped.

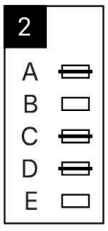
You should mark your answers on the answer sheet by **drawing a line** clearly through the rectangle with a pencil.

Choose **one** answer for each question, unless that question asks for **more than one** answer.

Marking a question with only one answer



Marking a question with more than one answer



Mistakes should be rubbed out. Do not cross out answers.

1

$$5 \times 12 =$$

A 50 **B** 55 **C** 60 **D** 70 **E** 72

2

$$500,000 + 3,000 + 7 =$$

A 503,007 **B** 503,700 **C** 530,007 **D** 530,700 **E** 537,000

3

$$79 - \square = 25$$

A 44 **B** 46 **C** 53 **D** 54 **E** 56

4

$$0.4 \times 100 =$$

A 0.04 **B** 0.4 **C** 4 **D** 40 **E** 400

5

$$7 \times 17 =$$

A 77 **B** 79 **C** 109 **D** 117 **E** 119

6

$$\frac{1}{8} =$$

A 0.12 **B** 0.125 **C** 0.175 **D** 0.375 **E** 0.8

Please go on to the next page »

7

$$2 - \square = 1.67$$

A 0.23 **B** 0.33 **C** 0.34 **D** 0.43 **E** 1.32

8

$$\frac{5}{7} = \frac{\square}{84}$$

A 55 **B** 60 **C** 65 **D** 70 **E** 75

9

$$4 \times 7 \times 25 =$$

A 175 **B** 300 **C** 350 **D** 600 **E** 700

10

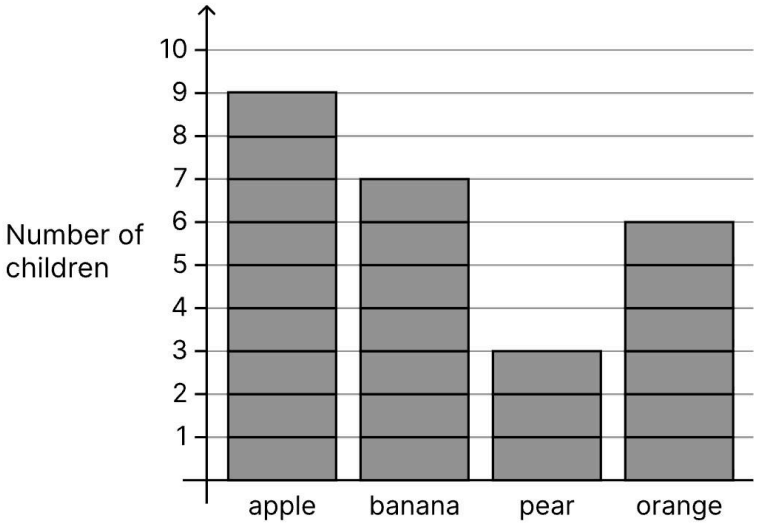
$$\frac{1}{5} \text{ of } 410 =$$

A 21 **B** 44 **C** 81 **D** 82 **E** 205

Please go on to the next page »

11 Some children voted for their favourite fruit. The chart below shows the results.

How many children voted in **total**?



A 19 **B** 20 **C** 22 **D** 24 **E** 25

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12 I roll two fair, six-sided dice, then add the results together.

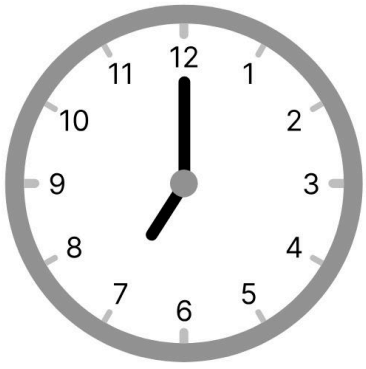
How many different **prime numbers** could my answer be?

A two **B** four **C** five **D** eleven **E** twelve

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13 This clock shows **7 o'clock**.

What is the **obtuse** angle between the clock's hands?



A $75°$ **B** $125°$ **C** $150°$ **D** $175°$ **E** $210°$

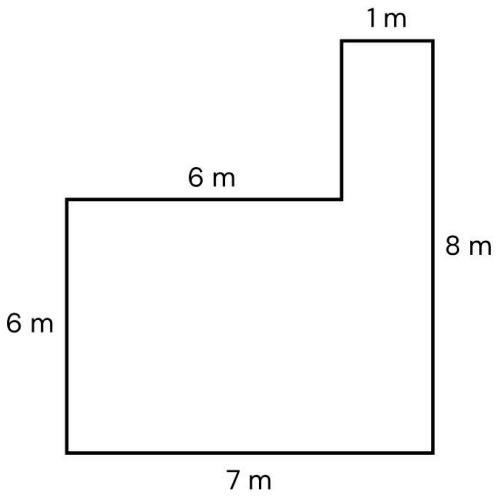
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14 Choose **all** of the common factors of 48 and 36.

A 2 **B** 4 **C** 6 **D** 8 **E** 12

Please go on to the next page »

15 What is the total **area** of this shape?



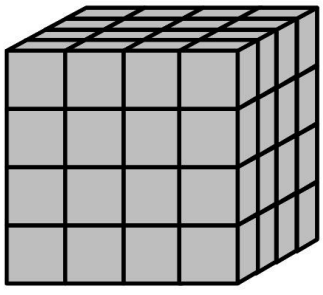
This image is not to scale.

A $38\ \text{m}^2$ **B** $44\ \text{m}^2$ **C** $50\ \text{m}^2$ **D** $58\ \text{m}^2$ **E** $60\ \text{m}^2$

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16 The cube below is made up of $2\ \text{cm}^3$ smaller cubes.

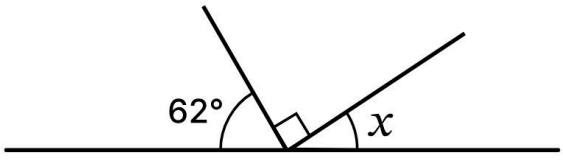
What is its **volume**?



A $32\ \text{cm}^3$ **B** $64\ \text{cm}^3$ **C** $96\ \text{cm}^3$ **D** $128\ \text{cm}^3$ **E** $256\ \text{cm}^3$

Please go on to the next page »

17 What is the size of angle x?



A $28°$ **B** $38°$ **C** $58°$ **D** $62°$ **E** $208°$

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18 There are three trains a day from Blueville to Blackport. The timetable below shows when the train arrives at different stops.

Each train travels at the same speed.

What time will Train 3 arrive at Green Hill?

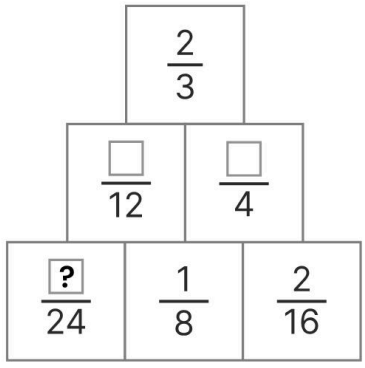
Train Station	Train 1	Train 2	Train 3
Blueville	9 : 30	12 : 30	16 : 00
Red Town	9 : 37	12 : 37	16 : 07
Green Hill	10 : 02	13 : 02	
Blackport	10 : 38	13 : 38	17 : 08

A 13:02 **B** 16:02 **C** 16:32 **D** 16:42 **E** 17:02

Please go on to the next page »

19 In this pyramid, the two fractions below **add** up to make the fraction above.

Which digit should replace the question mark?



A 2 **B** 3 **C** 5 **D** 7 **E** 8

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20 There are two digits missing from this long multiplication.

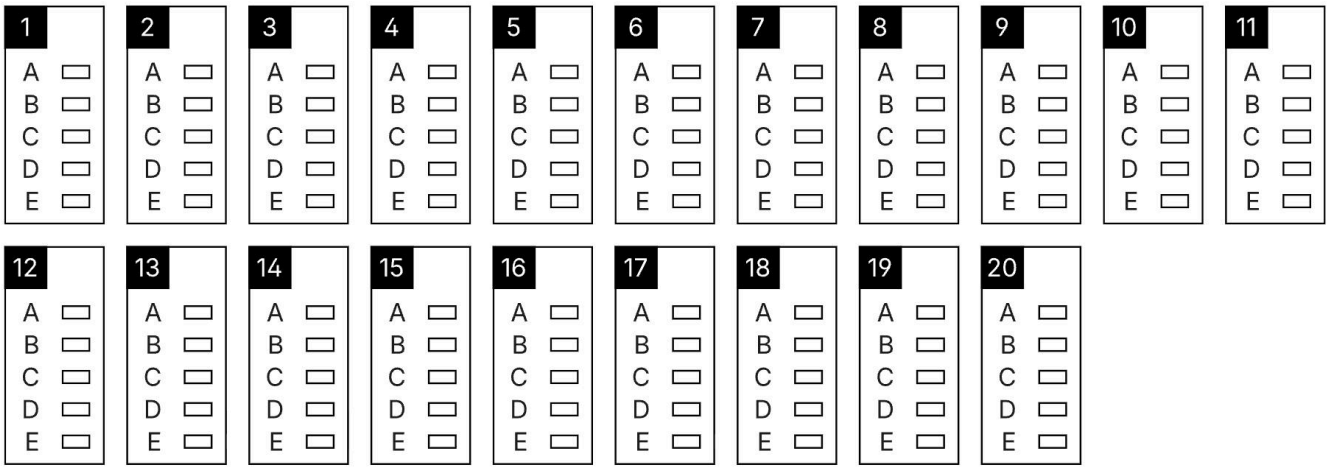
Which digit should replace the question mark?

$$\begin{array}{rrrrr} & & 4 & 5 & \square \\ \times & & & ? & 8 \\ \hline & 3 & 6 & 1 & 6 \\ 1 & 3 & 5 & 6 & 0 \\ \hline 1 & 7 & 1 & 7 & 6 \end{array}$$

A 2 **B** 3 **C** 4 **D** 6 **E** 8

END OF TEST

Draw a line clearly through the rectangle next to your answer, like this ▭.
To change your answer, use a rubber to remove the original marking. Do not cross out.



END OF TEST

Maths Answer Key

1 C	6 B	11 E	16 D
2 A	7 B	12 C	17 A
3 D	8 B	13 E	18 C
4 D	9 E	14 A, B, C, E	19 D
5 E	10 D	15 B	20 B