

GL Mock 3 Maths



- Listen carefully to instructions that will be given.
- This paper starts with some practice questions.
- You will have **5 minutes** to complete the practice questions.
- You will have **25 minutes** to complete this paper.
- All answers should be marked on the separate answer sheet provided.

Maths Practice Section

(5 minutes)

This practice section gives an example of the sort of questions you will be faced with in this test, with the correct answer filled in on the answer sheet so that you can see how to do it.

There are also some practice questions that don't have the answers filled in, so that you can practise working them out for yourself and filling in the answer sheet.

Work out the correct answer and mark its letter on the answer sheet.

A Example

I think of a number.
I triple my number and then I subtract 9.
The final result is 30.

A. 39 B. 8 C. 13 D. 16 E. 21

The answer is **13**. You can work this out by working backwards and applying inverse operations. Start with 30 and add 9. This is equal to 39. We now need to divide this number by 3, which makes 13.

The correct answer has been marked on your answer sheet.

Now try these practice questions.

Work out the correct answer and mark it on the answer sheet.

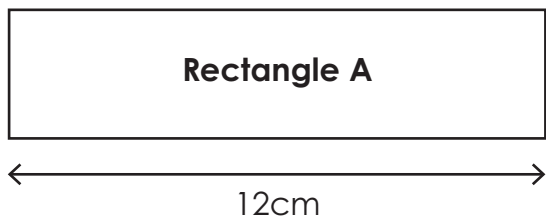
1 Practice

Which of these numbers is NOT a square number?

- A. 16 B. 25 C. 1 D. 49 E. 65

2 Practice

The perimeter of Rectangle A is 32cm. What is the width of the rectangle?



- A. 6cm B. 7cm C. 8cm D. 4cm E. 3cm

END OF PRACTICE SECTION

The maths test begins on the next page.

- You have 25 minutes to complete the maths test.
- There are 25 questions to answer.
- Your time will start when you turn over the page.
- Do not turn over the page until you are told to do so.

Maths
(25 minutes)

Work out the correct answer and mark its letter on your answer sheet.

- 1** What is the value of 7 in the number 3,472,819?
- A** 700 **B** 7,000 **C** 70,000 **D** 700,00 **E** 7,000,000
-
- 2** A right-angled triangle has a base of 9cm and a height of 14cm.
What is its area?
- A** 63cm² **B** 126cm² **C** 46cm² **D** 23cm² **E** 57cm²
-
- 3** Which option represents the most stickers?
- A** 3 sheets of 24 stickers each.
- B** 2 sheets of 18 stickers and 4 sheets of 12 stickers each.
- C** 4 sheets of 25 stickers and 1 sheet of 16 stickers.
- D** 6 sheets of 20 stickers each.
- E** 5 sheets of 23 stickers each.

- 4** Calculate: $4\frac{2}{3} - 2\frac{3}{4}$
- A** $1\frac{1}{12}$ **B** $2\frac{1}{12}$ **C** $1\frac{5}{6}$ **D** $2\frac{5}{12}$ **E** $1\frac{7}{12}$
- 5** Look at the sequence below.
- 84, 77, 70, ...
- Which term of the sequence will be equal to 0?
- A** 11th **B** 12th **C** 13th **D** 14th **E** 15th
- 6** The length of a rope is 17.83m.
The rope is wound three times around a cylindrical post of circumference 43cm.
What length of rope is left unused?
- A** 16.40m **B** 17.40m **C** 16.68m **D** 15.25m **E** 16.54m
- 7** A car uses 8.4 litres of fuel per 100km. How much fuel will it use on a 350km journey?
- A** 26.6 litres **B** 32.4 litres **C** 25.2 litres **D** 29.4 litres **E** 30 litres
- 8** Anya thinks of a multiple of 17. If she subtracts 9, it becomes a multiple of 12.
What number did Anya think of?
- A** 85 **B** 119 **C** 170 **D** 136 **E** 153

- 9 Order these from smallest to largest:

0.6, $\frac{3}{5}$, $\frac{3}{4}$, 0.58, $\frac{7}{10}$

A 0.58, $\frac{3}{5}$, 0.6, $\frac{7}{10}$, $\frac{3}{4}$

B $\frac{3}{4}$, 0.58, $\frac{3}{5}$, 0.6, $\frac{7}{10}$

C 0.58, 0.6, $\frac{7}{10}$, $\frac{3}{5}$, $\frac{3}{4}$

D $\frac{3}{5}$, 0.58, $\frac{7}{10}$, 0.6, $\frac{3}{4}$

E 0.6, 0.58, $\frac{3}{5}$, $\frac{3}{4}$, $\frac{7}{10}$

- 10 Use the timetable below to answer questions 10 and 11.

If train 1 is delayed by 23 minutes at Ashford and by a further 8 minutes' delay at Maidstone, what time will it arrive at Tonbridge?

Explore Rail – Morning Services			
	Train 1	Train 2	Train 3
Ashford	06:12	07:45	08:30
Maidstone	07:04	08:37	09:22
Tonbridge	07:51	09:24	10:09
London Bridge	09:03	10:36	11:21

A 08:09 B 08:14 C 08:19 D 08:22 E 08:25

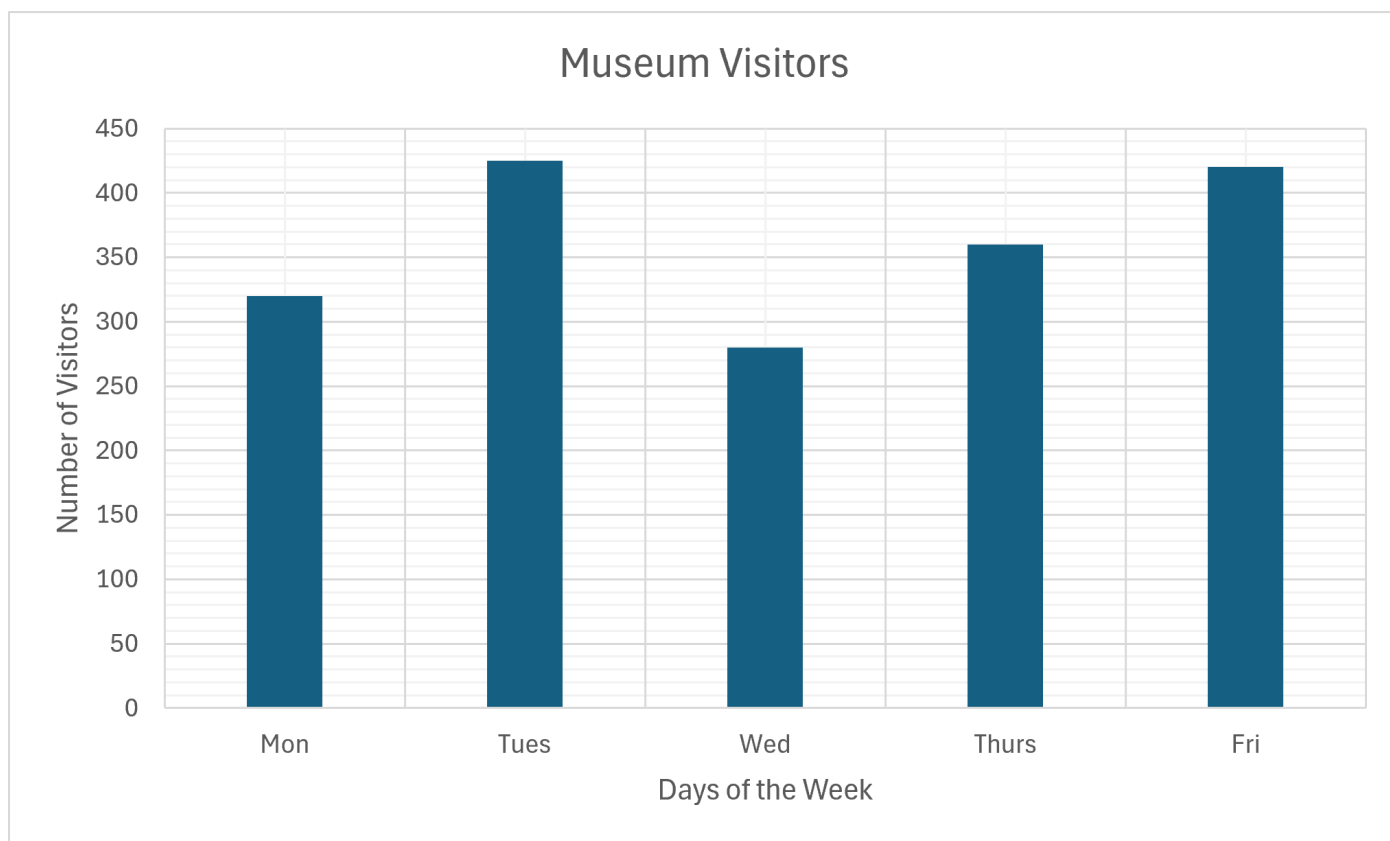
- 11 Priya wants to arrive in London Bridge no later than 11:00. She is at Maidstone. Which is the latest train she can catch?

A Train 1 B Train 2 C Train 3 D Any train E Train 1 and Train 2

- 12** A rectangular fish tank measures $60\text{cm} \times 35\text{cm} \times 40\text{cm}$.
It is filled to $\frac{3}{4}$ of its capacity with water.
How many litres of water does it contain? (1 litre = 1000cm^3)
- A** 63 litres **B** 84 litres **C** 72 litres **D** 56 litres **E** 48 litres
- 13** The thermometer shows -4°C . By midday the temperature has risen by 11°C .
By midnight it falls by 9°C . What is the midnight temperature?
- A** -6°C **B** -2°C **C** 6°C **D** 2°C **E** 4°C

The graph below shows the number of visitors to a museum over five days.

Use the graph to answer questions 14–16.



- 14** How many more visitors went to the museum on Friday than on Wednesday?
- A** 190 **B** 210 **C** 160 **D** 220 **E** 140

15 What is the mean number of daily visitors?

- A** 375 **B** 383 **C** 361 **D** 363 **E** 353

16 What is the range of the number of daily visitors?

- A** 195 **B** 214 **C** 120 **D** 145 **E** 136

17 Calculate: 15.6×8.5

- A** 130.6 **B** 132.6 **C** 133.2 **D** 134.6 **E** 131.2

18 Find 12% of £345.

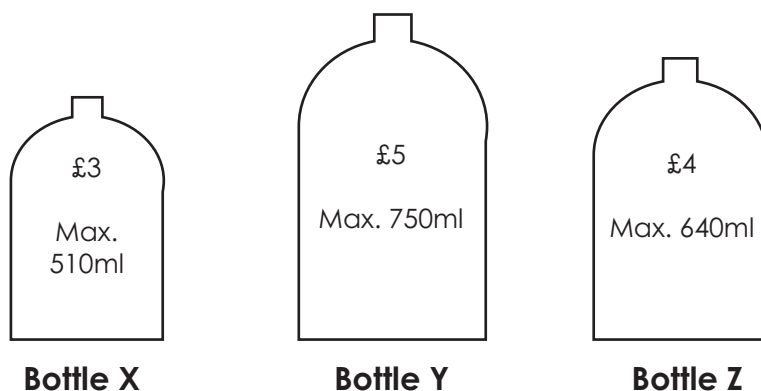
- A** £39.40 **B** £41.40 **C** £43.80 **D** £40.60 **E** £38.90

19 A cinema has 24 rows. The first 8 rows each have 15 seats. The remaining rows each have 18 seats. How many seats are there in total?

- A** 408 **B** 420 **C** 288 **D** 312 **E** 432

- 20** What is the value of k in: $5k^2 = 125$?
- A** 3 **B** 4 **C** 5 **D** 6 **E** 25
- 21** A shop reduces a jacket priced at £85 by 35%. A week later the reduced price is increased by 20%. What is the final price?
- A** £62.40 **B** £55.25 **C** £66.30 **D** £63.75 **E** £68.00
- 22** $5^2 + 2^3 + 3 = x^2$
- What is the value of x ?
- A** 5 **B** 6 **C** 7 **D** 8 **E** 9
- 23** Three friends buy lunch. Kim spends £2 more than Lena. Tom spends twice as much as Lena. Together they spend £22. How much does Kim spend?
- A** £5 **B** £6 **C** £7 **D** £8 **E** £9

- 24** Three water bottles have different capacities. Each bottle is a different price.



Which bottle has the lowest capacity per pound (£)?

- A** Bottle X **B** Bottle Y **C** Bottle Z **D** Both X and Z **E** Both Y and Z

- 25** A computer program carries out the following steps:

If (old) number < 150, then (new) number = (old) number $\times$ 2
Print (new) number (on the screen)
Repeat the calculation steps

When the program repeats, the (new) number becomes the (old) number for the next cycle.

If Priya inputs the (old) number 17, what is the 3rd number she will see on the screen?

- A** 34 **B** 119 **C** 272 **D** 68 **E** 136

END OF MATHEMATICS TEST.

