

#### **Answer Sheet**

Paper Name: Exam Happy Maths Paper 1

**Subject:** Mathematics



Student ID	First Name	Last Name			
	forte eller				
Instructions					

## How to answer: A B C D E 1. Ensure that you mark answers for the correct questions 2. Mark ONE answer for each question using a HB pencil 3. Use an eraser to rub out any errors thoroughly

01	А	В	С	D	Е
02	А	В	С	D	Е
03	А	В	С	D	Е
04	А	В	С	D	Е
05	А	В	С	D	Е
06	А	В	С	D	E
07	А	В	С	D	E
08	А	В	С	D	E
09	А	В	С	D	Е
10	А	В	С	D	Е
11	А	В	С	D	E
12	А	В	С	D	E
13	А	В	С	D	E
14	А	В	С	D	E
15	А	В	С	D	E
16	А	В	С	D	E
17	А	В	С	D	E
18	А	В	С	D	E
19	А	В	С	D	E
20	А	В	С	D	Е
21	А	В	С	D	Е
22	А	В	С	D	Е
23	А	В	С	D	Е
24	А	В	С	D	Е
25	А	В	С	D	Е

26	А	В	С	D	Е
27	А	В	С	D	Е
28	А	В	С	D	Е
29	А	В	С	D	Е
30	А	В	С	D	Е
31	А	В	С	D	Е
32	А	В	С	D	Е
33	А	В	С	D	Е
34	А	В	С	D	Е
35	А	В	С	D	Е
36	А	В	С	D	Е
37	А	В	С	D	Е
38	А	В	С	D	Е
39	А	В	С	D	Е
40	А	В	С	D	Е
41	А	В	С	D	Е
42	А	В	С	D	Е
43	А	В	С	D	Е
44	А	В	С	D	Е
45	А	В	С	D	Е
46	А	В	С	D	Е
47	А	В	С	D	Е
48	А	В	С	D	Е
49	А	В	С	D	Е
50	А	В	С	D	Е





### 11+ Sample

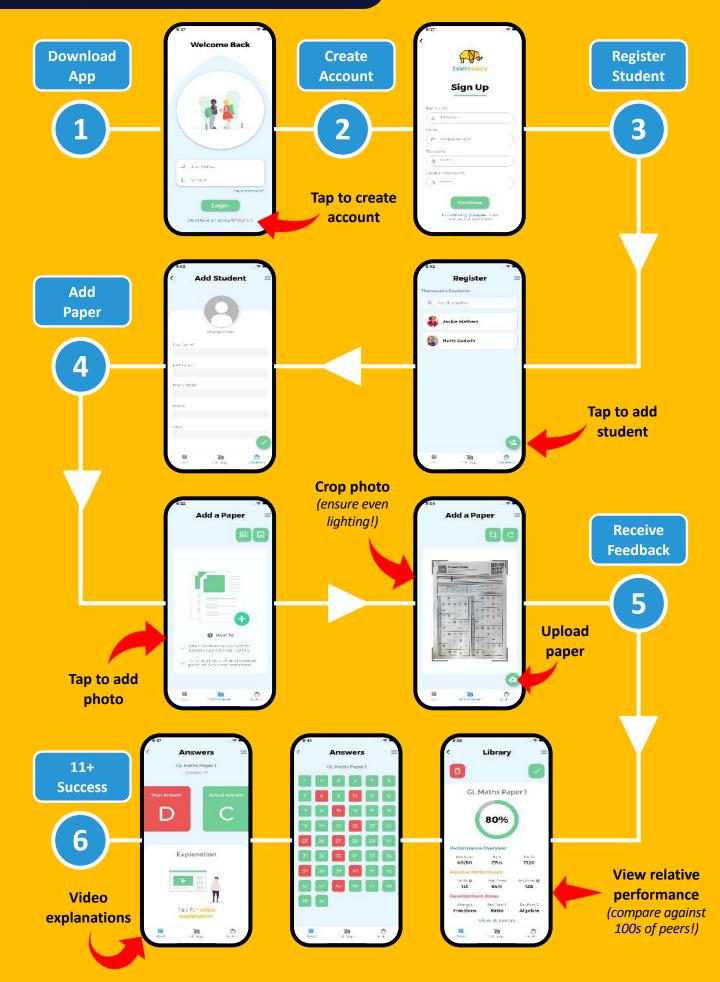
**GL Assessment Style Exam** 





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#### Using the App



# Mathematics

#### Sample Paper

#### Instructions

- 1. You have 50 minutes to complete this test
- **2.** This is a multiple-choice test and each question carries one mark
- Mark you answers clearly on the answer sheet using a HB pencil
- **4.** Ensure that the rectangle on the answer sheet is fully shaded in like this
- 5. If you mark the wrong answer, ensure that you erase it and mark your new answer clearly
- **6.** Any rough workings should be done on a separate sheet of paper
- **7.** Do not turn over page until you are told to do so
- 8. Use the Exam Happy app to mark your answers and see where you rank amongst peers

Download at www.examhappy.co.uk/app





The number 3 represents 3 units.

25,103

What does the number 5 represent?

- A 500
- **B** 5,000 **C** 50 **D** 50,000
- E 5

Look at the magic grid below, which follows a pattern.

7	14	21
14	?	28
21	28	35

What is the missing number?

- **A** 7
- B 20
- C 21 D 35 E 15

How many sixes are in 216?

- **A** 30
- **B** 36 **C** 1296 **D** 54
- E 520

Which number is both divisible by 3 and 7?

- **A** 14
- **B** 31
- C 30 D 72
- E 42

#### Which of the following numbers is closest to 1?

**A** 1.001

**B** 0.9991

C 1.01

**D** 1.0095

E 0.899

There are 12 people on the bus to town. At the first stop, 3 people get off and 7 people get on. At the second stop, half of the bus get off, whilst another 21 people get on.

How many people are on the bus after the second stop?

**A** 29

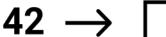
**B** 37

C 25

D 31

E 23

The number machine below multiples by 3 and then divides by 7.







?

What number comes out of the machine?

**A** 98

**B** 18

C 882

**D** 72

E 24

Jasmine looks at a map of Olderton Town using a scale of 2 cm to 100 m. On the map, the lake is 9 cm wide.

How wide is the lake in reality?

**A** 400 m

**B** 450 m

C 1000 m

**D** 600 m

E 150 m

Kevin and Jason go to the ice-cream van after school for a snack. Kevin decides to buy a vanilla cone and a hot dog. Jason buys only the burger.



#### How much did they spend in total?

**A** £4.55

**B** £5.14

C £4.30

**D** £4.34

E £4.99

10

Jackie wishes to buy a Mother's day present for her mother Anne. To help her do this, Dad gives her £10.50, her brother gives her £3.25 and her aunt gives her £7.50.

#### How much does she have in total?

A £30.10

**B** £13.75

C £21.25

D £20.45

E £10.75

11

Pairs of socks cost £1.99 each.

#### How much do 7 pairs of socks cost?

**A** £14.07

**B** £13.49

C £13.90

D £13.93

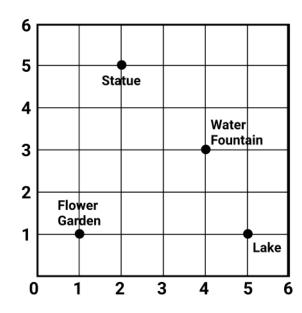
E £14.00

Tommy receives a £2.99 student discount at the local sandwich shop. He buys a cheese sandwich meal which usually costs £6.50.

How much does the meal cost after Tommy uses his discount?

- A £4.51 B £4.49
- C £9.49
- D £3.51
- E £8.49

The graph below shows the layout of the Hillberry Park.



What are the coordinates of the water fountain?

- A (2, 1) B (1, 2) C (4, 3) D (3, 4) E (5, 1)

Mr. Mansel bought 30 sets of colouring pencils for his class, costing him £405.00 in total.

How much did one set of colouring pencils cost?

- A £14.50
- B £8.50
- C £13.50
- D £12.50
- E £15.00

Gary is 3 times older than his brother Andrew, who is 2 years older than cousin Sarah. Gary is 15 years old.

How old is Sarah?

A 7

**B** 30

**C** 5

**D** 32

E 3

16

600 people are interviewed for a survey. 1/3 of them are married.

How many people are not married?

**A** 200

**B** 450

C 150

D 300

E 400

17

Which of the following objects weighs about 500 g?

A a chair

B a grape

C a bed

D a book

E a shovel

18

Auntie Bessie grows tomatoes in her garden.

In her 1st year, she grew 37 tomatoes.

In her 2nd year, she grew twice as many tomatoes as the year before. In her 3rd year, she grew 3 times as many tomatoes as the year before.

How many tomatoes did Auntie Bessie grow in her 3rd year?

**A** 148

**B** 158

**C** 192

D 204

E 222

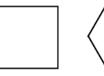
Ash and his older brother Mario have special ages. Ash's age is a cube number and Mario's age is a square number.

#### What could their ages be?

A 12 and 16 B 9 and 16

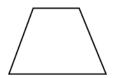
C 8 and 21 D 16 and 29 E 8 and 16

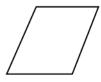
How many shapes have more than 2 lines of symmetry?











**A** 3

B 2

C 4

D 1

E 5

Dan is moving homes and is packing up his books into cardboard boxes. A cardboard box can fit up to 15 books. In total, Dan has 78 books.

#### How many cardboard boxes does Dan require?

**A** 5

B 4

**C** 8

D 6

E 10

Nancy took cooking lessons which cost her £199. She also had to pay a registration fee which cost £5. She chose to pay for this in 3 equal installments.

#### How much did one installment cost her?

A £68

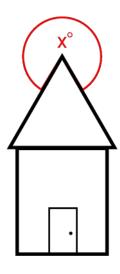
**B** £51

C £66

D £57

E £70

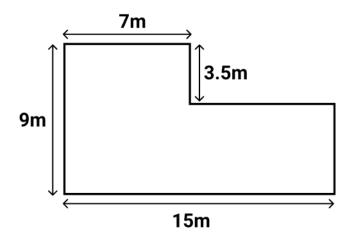
Sarah draws a house using a square and an equilateral triangle.



What is the size of angle x?

- A 180°
- **B** 150° **C** 60°
- D 320° E 300°

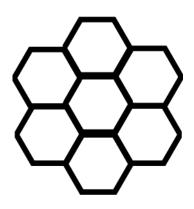
Mr. Mills wants to add fencing around his garden.



How many metres of fencing will he require?

- **A** 34.5 m
- **B** 40.5 m
- C 48.0 m
- **D** 39.0 m
- E 47.5 m

Boris the beekeeper obtained a piece of honeycomb from his beehives.

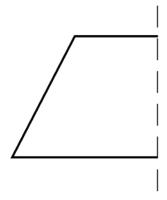




What is the total area of the honeycomb piece?

- **A** 175 mm<sup>2</sup> **B** 150 mm<sup>2</sup> **C** 250 mm<sup>2</sup> **D** 200 mm<sup>2</sup> **E** 100 mm<sup>2</sup>

Hassan draws a shape and then draws a mirror line.



What shape does he get after reflecting it in the mirror line?

- **A** Rhombus
- **B** Triangle
- C Kite
- D Trapezium E Parallelogram

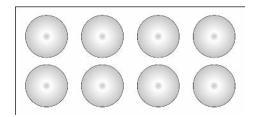
Mrs. Chapman takes the family on a paintballing trip. Admission costs £15 per person and paintballs cost £7 per 100 balls.

How much would it cost for Mrs. Chapman and her 2 children if they all bought 200 balls each?

- **A** £45
- B £87
- C £85
- D £59
- E £63

28

Ella is baking a cake which requires 2 eggs.



What percentage of eggs are left after Ella uses them?

- **A** 75%
- B 80%
- C 60%
- D 66%
- E 50%

29

Which of the following words has a vertical line of symmetry?

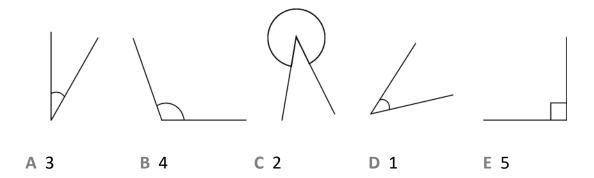
wow	dog	toot	on	pop
A wow	B dog	C toot	D on	E pop

30

What percentage of 10 cm is 5 mm?

- **A** 50%
- **B** 5%
- C 10%
- D 20%
- E 55%

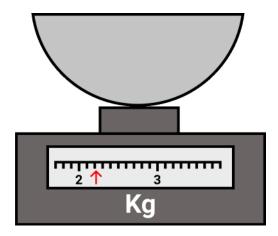
#### How many obtuse angles are there below?



#### How many millilitres are in 50 centilitres?

- **A** 500 ml
- **B** 5 ml **C** 5000 ml **D** 0.5 ml **E** 0.05 ml

At the grocer's, Maria buys some bananas which were weighed on a scale.

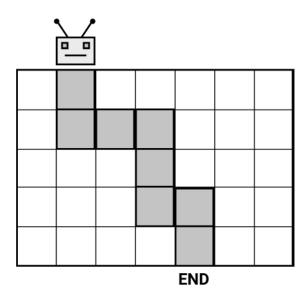


How much do they bananas weigh if she removes 300 g of bananas?

- **A** 1.9 kg
- **B** 2.0 kg
- C 2.5 kg
- **D** 2.2 kg
- E 1.8 kg

Trina has programmed a robot to follow the white path below. The robot can only take the following movements:

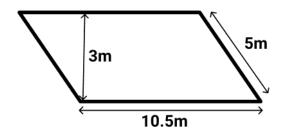
FORWARD, TURN RIGHT 90 DEGREES and TURN LEFT 90 DEGREES.



#### What is the correct sequence of movements that the robot takes?

- A FORWARD 2, TURN RIGHT 90 DEGREES, FORWARD 2, TURN LEFT 90 DEGREES, FORWARD 2, TURN LEFT 90 DEGREES, FORWARD 1, TURN RIGHT 90 DEGREES, FORWARD 2
- B FORWARD 2, TURN RIGHT 90 DEGREES, FORWARD 2, TURN LEFT 90 DEGREES, FORWARD 2, TURN RIGHT 90 DEGREES, FORWARD 1, TURN RIGHT 90 DEGREES, FORWARD 2
- C FORWARD 2, TURN RIGHT 90 DEGREES, FORWARD 2, TURN LEFT 90 DEGREES, FORWARD 2, TURN LEFT 90 DEGREES, FORWARD 2, TURN RIGHT 90 DEGREES, FORWARD 2
- D FORWARD 2, TURN RIGHT 90 DEGREES, FORWARD 3, TURN LEFT 90 DEGREES, FORWARD 2, TURN LEFT 90 DEGREES, FORWARD 1, TURN RIGHT 90 DEGREES, FORWARD 2
- FORWARD 2, TURN LEFT 90 DEGREES, FORWARD 2, TURN RIGHT 90 DEGREES, FORWARD 2, TURN LEFT 90 DEGREES, FORWARD 1, TURN RIGHT 90 DEGREES, FORWARD 2

Javaria sketches a parallelogram in her Maths class.



What is the area of the parallelogram?

- A 15.0 cm<sup>2</sup>
- **B** 52.5 cm<sup>2</sup>
- C 31.0 cm<sup>2</sup>
- **D** 18.5 cm<sup>2</sup> **E** 31.5 cm<sup>2</sup>

Which one of the following options gives an answer of 24?

- A 70% of 20
- **B** 2/3 of 66
- C 3/7 of 84
- D 50% of 50
- E 30% of 80

Adrian sketches a rectangle with a length three times that of its width.



8.1cm

What is the perimeter of the rectangle?

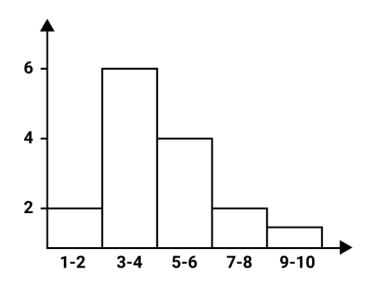
- **A** 20.2 cm
- **B** 32.4 cm
- C 21.6 cm
- **D** 19.6 cm
- E 16.2 cm

In 10 years' time, Albert will be 25 years old.

How old was he 3 years ago?

- A 32
- B 12 C 15
- D 18
- E 20

The bar chart shows children from class 5A grouped by the number of people living in their household.



How many children live in households with more than 6 people?

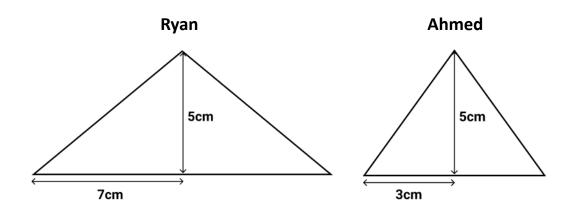
- A 2
- **B** 8
- **C** 6
- **D** 3
- E 7

For the Boxing Day sales, a video game was reduced in price by 20%. The original price was £60.

How much does the video game cost now?

- A £12
- **B** £38
- C £54
- D £48
- E £42

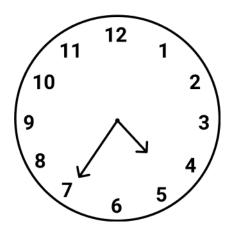
Ryan and Ahmed took turns to draw triangles.



How much smaller in area is Ahmed's triangle compared to Ryan's?

- A 55 cm<sup>2</sup>
- **B** 40 cm<sup>2</sup>
- C 10 cm<sup>2</sup>
- **D** 20 cm<sup>2</sup>
- E 25 cm<sup>2</sup>

The clock on the wall reads the following time.

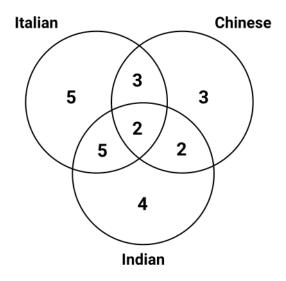


What will be the size of the smaller angle between the clock hands in 25 minutes?

- A 150° B 90°
- C 210° D 100° E 105°

30 children were asked whether they like Italian, Chinese and Indian cuisine.

The results are displayed in the Venn diagram below:



How many children like both Chinese and Indian cuisines?

- **A** 4
- **B** 6
- C 10
- **D** 5
- E 7

44

There are 5 students attending the Art class:

- 1. Micky
- 2. Suzanne
- 3. Terry
- 4. Ashwin
- 5. Winossa

What percentage of students have names longer than 5 letters?

- A 20%
- B 60%
- C 80%
- D 40%
- E 100%

The year 6 netball team plays a number of games this year. The below table summarises their performance by season.

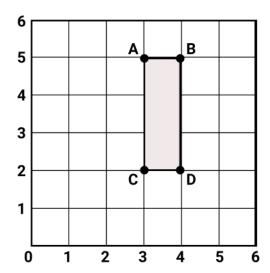
	Win	Loss	Draw
Autumn	3	4	1
Spring	2	2	4
Summer	5	2	1

How many games did the team NOT lose in Spring term?

- A 7
- B 2
- **C** 3
- D 4
- E 6

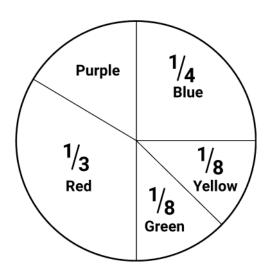
46

Which set of coordinates describe the corner points of the rectangle below?



- **A** (5, 4), (5, 5), (4, 4), (5, 4)
- **B** (3, 2), (2, 4), (3, 5), (5, 4)
- **C** (3, 2), (4, 2), (3, 5), (4, 5)
- **D** (2, 3), (2, 4), (5, 3), (5, 4)
- **E** (4, 5), (5, 5), (4, 6), (5, 4)

The pie chart below shows favourite colours of pupils in Class 4C. Class 4C has 36 pupils in total.

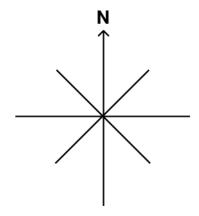


What fraction of pupils like purple the most?

- A 2/7

- B 1/5 C 1/3 D 1/6 E 1/4

Kiran is using a compass to find hidden treasure. She is currently face in due North.



How many degrees will she have to rotate to be facing south-west, if she turns clockwise?

- A 225° B 135° C 180° D 315° E 90°

Amir thinks of a number. He multiplies this number by 7 and then subtracts by 12. The number he ends with is 72.

What is the number Amir thinks of?

**A** 12

B 14

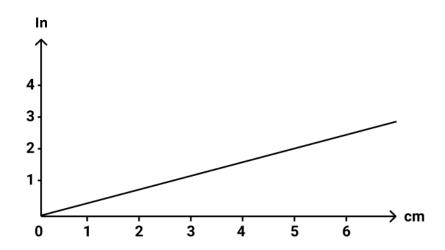
**C** 60

**D** 16

E 8

50

This graph converts centimetres into inches.



How many inches are in 500 cm?

**A** 150 in

**B** 200 in

**C** 75 in

**D** 750 in

E 300 in



#### About this pack



- Expertly created in line with the national curriculum
- **Excellent for Grammar school preparation**
- Automatic marking & performance review via App
- Detailed video explanations included via App

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