



Junior Maths Mastery Challenge 2025

Paper A

Student Name: _____

Student No.: _____

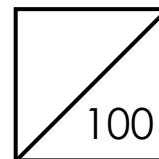
DO NOT OPEN THIS BOOKLET UNTIL INSTRUCTED.

Read the instructions on the **answer sheet** and fill in your **name, school** and **other information**.

Record your answers in your **answer sheet**.

You have **1 hour 30 minutes** to answer all 25 questions.

Junior Maths Mastery Challenge (2025)

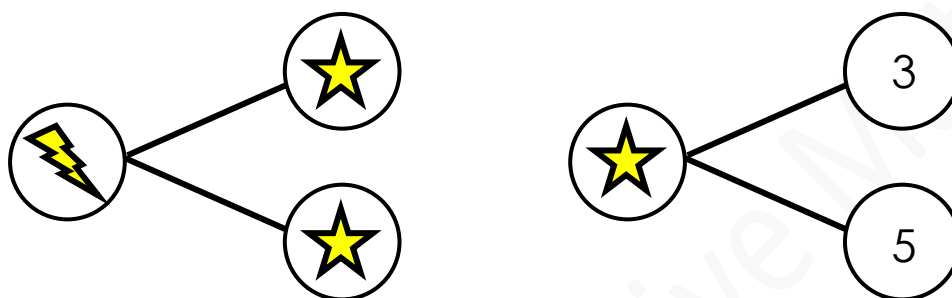


Paper A

Section A (70 marks)

Questions 1 to 10 carry 3 marks each.

1. Study the number bonds below.



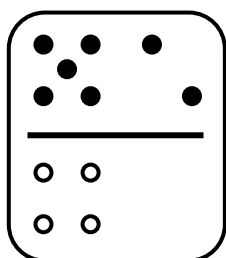
What number does  stand for?

- (A) 4 (B) 8 (C) 10
(D) 16 (E) 28
2. Joe buys some pizzas to share among 8 pupils.
Each pupil gets half a pizza.
How many pizzas does he buy?

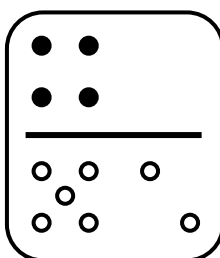


- (A) 2 (B) 4 (C) 5
(D) 6 (E) 8

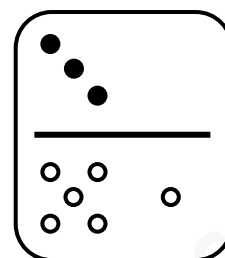
3. Study the following figures.



= 74

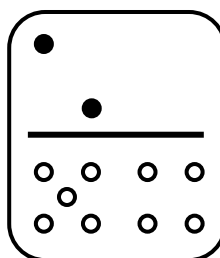


= 47



= 36

What number does



stand for?

(A) 25

(B) 24

(C) 29

(D) 63

(E) 92

4. Eric is given a number.

He adds 8 to the number.

He then subtracts 10 from the result.

He gets the number 20.

What number is given to him?

(A) 2

(B) 20

(C) 22

(D) 28

(E) 38

5. There are 20 pupils in a class.
The picture graph shows their favourite colours.



2 more pupils choose orange than green.
How many pupils choose orange?

- (A) 5 (B) 6 (C) 7
(D) 8 (E) 9

6. The numbers below follow a pattern.

(4) (20) (35) (49) (62) (74) ...

What is the next number?

- (A) 81 (B) 82 (C) 83
(D) 84 (E) 85

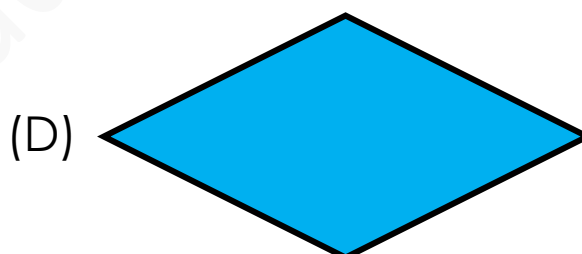
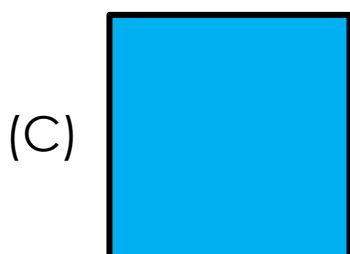
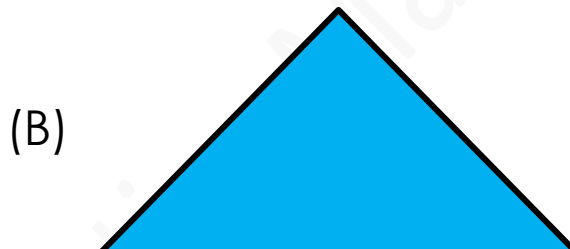
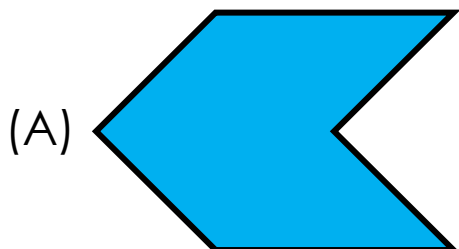
7. Ash has 24 stickers.
Betty has 50 stickers.
How many stickers must Betty give Ash so that they will have an equal number of stickers?

- (A) 12 (B) 13 (C) 24
(D) 25 (E) 26

8. The following triangles are of the same size.



Which of the following figures **cannot** be formed by the 4 triangles?





9. Lily is queueing to buy a movie ticket.
She is 5th in the queue.
She is 6th from the end of the queue.
How many people are in the queue?

(A) 6 (B) 9 (C) 10
(D) 11 (E) 12

10. Julia is 6 years old.
Her mother is 30 years old.
In how many years' time will their ages add up to 50 years?

(A) 44 years (B) 20 years (C) 14 years
(D) 10 years (E) 7 years

Questions 11 to 20 carry 4 marks each.

11. Find the missing number in the number pattern.

3	7	?
6	1	8
6	7	2

(A) 4

(B) 5

(C) 6

(D) 7

(E) 8

12. Study the equations below.

$$\heartsuit + \blacklozenge = 55$$

$$\heartsuit - \blacklozenge = 33$$

What number does  stand for?

(A) 11

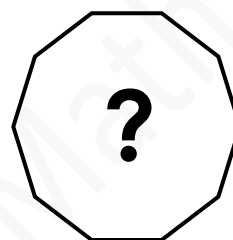
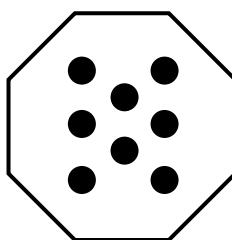
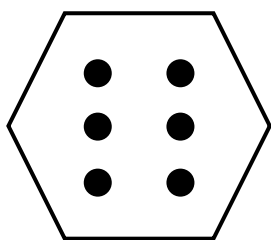
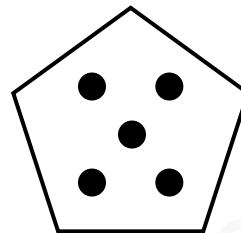
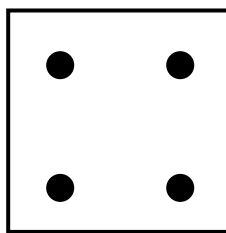
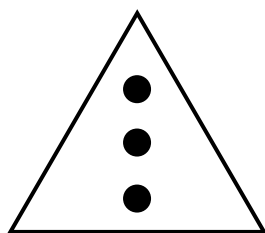
(B) 22

(C) 33

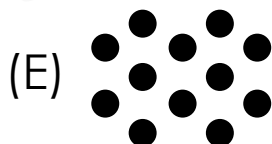
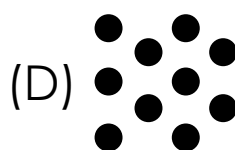
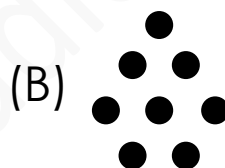
(D) 44

(E) 88

13. Study the shapes below.



Which of the following shows the missing dots in the last shape?

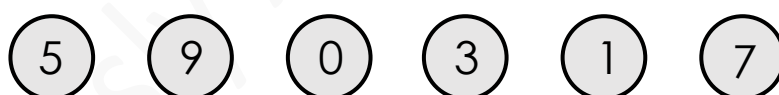


14. Find the missing number in the number pattern below.

		42			34			19
16	34	9	32	20	19	14	40	?

- (A) 2 (B) 29 (C) 33
(D) 36 (E) 38

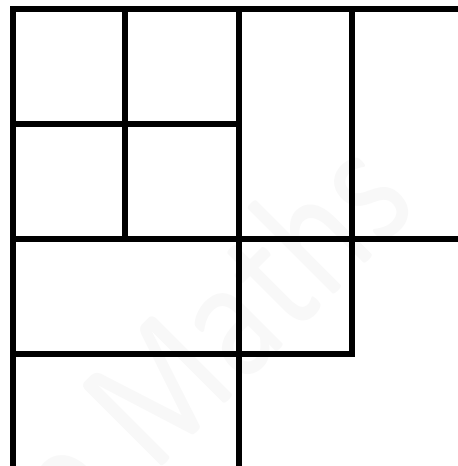
15. Use the digits below to form two 2-digit numbers. Each digit can only be used once.



What is the smallest value we can get when we subtract one number from the other?

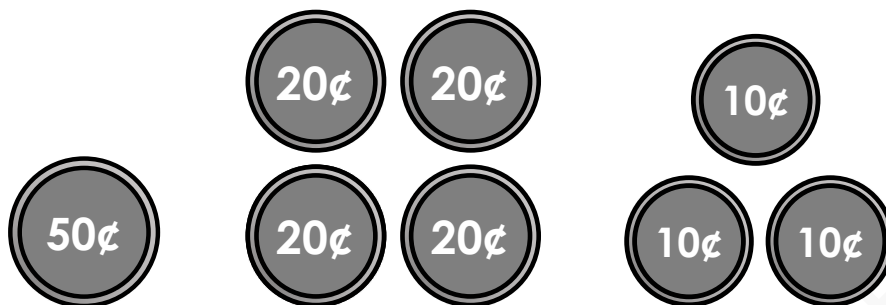
- (A) 1 (B) 8 (C) 11
(D) 14 (E) 15

16. The figure is made up of squares and rectangles.
How many squares are there in the figure?



- (A) 10 (B) 11 (C) 12
(D) 13 (E) 14

17. Ben has the following coins.



He wants to buy a cup of tea for 90¢.
How many different ways can he pay an exact amount for the tea?

(A) 2

(B) 3

(C) 4

(D) 5

(E) 6

18. Ali wants to put all 16 candies into three packs.
Each pack must have more than 3 candies.
How many ways can he pack the candies?

- (A) 4 (B) 5 (C) 6
(D) 7 (E) 8

19. The numbers 1 to 8 are to be filled in the white squares.
The numbers 2, 7 and 8 have been filled in for you.
The three numbers on each side add up to 13.
What number does S stand for?

P	7	Q
8		2
R	S	T

- (A) 1 (B) 3 (C) 4
(D) 5 (E) 6

20. Five children are queueing at an ice-cream stall.

- There are no children in front of Sam.
- Amy is in front of Mindy.
- Helen is in front of Mindy and between Tom and Sam.
- Only one child is between Mindy and Tom.

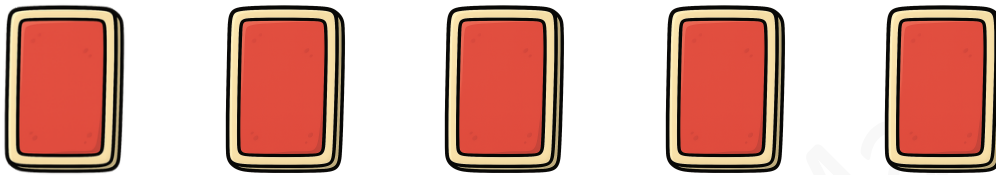
Arrange the children in order, from the first to the last in the queue.

- (A) Sam, Amy, Helen, Tom, Mindy
- (B) Sam, Amy, Tom, Helen, Mindy
- (C) Sam, Helen, Tom, Amy, Mindy
- (D) Sam, Amy, Helen, Mindy, Tom
- (E) Sam, Helen, Tom, Mindy, Amy

Section B (30 marks)

Questions 21 to 25 carry 6 marks each.

21. The five cards below have the numbers 5, 10, 15, 20 and 25.



1st

- The first three numbers add up to 40.
- The first four numbers add up to 60.
- The last three numbers add up to 40.
- The last four numbers add up to 65.

What is the third number?

- (A) 5 (B) 10 (C) 15
(D) 20 (E) 25



22. In the equation below, letters P, Q, R and S represent different digits.

$$\begin{array}{r} P \quad Q \\ + \quad R \quad S \\ \hline Q \quad P \end{array}$$

What is the greatest number QP can be?

- (A) 95 (B) 96 (C) 97
(D) 98 (E) None of the above

23. There are 15 people who want to cross a river.
There is 1 boat.
At most 4 people can be in the boat at one time.
What is the fewest number of trips needed to get everyone across the river?



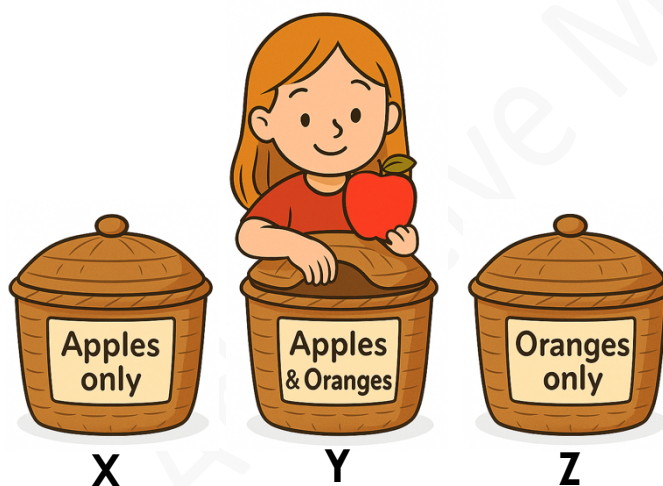
- (A) 3 (B) 4 (C) 5
(D) 6 (E) 7

24. There are three baskets, X, Y and Z.

- One basket has only apples.
- One basket has only oranges.
- One basket has both apples and oranges.

All the baskets are labelled **wrongly**.

Alice takes out a fruit from the 'Apples & Oranges' basket, which is an apple, as shown below.



Which of the following statements is **false**?

- (A) Basket Y has apples only.
- (B) Basket X has oranges.
- (C) Basket X has apples.
- (D) Basket Z has oranges.
- (E) Basket Z has apples.

25. Tom, Ken and Lisa each take 1 bean.

They can choose to hold the bean or hide it.

No one knows what the others choose to do.

Then, they take turns guessing how many beans are hidden.

Tom: '3 beans are hidden.'

Ken: '1 bean is hidden.'

Lisa: 'I know how many beans are hidden!'

Lisa is right.

Which of the following may be **true**?



- (A) Only Lisa hid her bean.
- (B) Only Ken hid his bean.
- (C) Only Ken and Lisa hid their beans.
- (D) Only Tom and Lisa hid their beans.
- (E) No one hid their bean.

END OF PAPER

Seriously Addictive Maths

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