



KMMC 2

Karate Masters Mathematics Competitions 2

4th Annual

KMMC 2 B

Saturday, August 29, 2026



INSTRUCTIONS

1. Please don't open this booklet until you start the test.
2. This is a twenty-five question multiple choice test. For each question, only one answer choice is correct.
3. Answer the problems by typing your answers on the KMMC 2 Answer Form with a keyboard. Check the keys for accuracy and erase errors and stray marks completely.
4. **SCORING:** You will receive 1 point for each correct answer, 0 points for each problem left unanswered, and 0 points for each incorrect answer.
5. You can only use blank scratch paper, rulers, and erasers. Don't use anything else! No problems on the competition will require the use of a calculator.
6. Figures are not necessarily drawn to scale.
7. Before beginning the competition, your competition manager will not ask you to record your name and other information on the answer sheet.
8. You will have 25 minutes to complete the competition once you start the test.
9. When you finish the competition, don't sign your name in the space provided on the answer sheet.

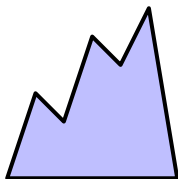
If we find out you cheated, we will remove your score.

Please don't send the problems to someone else or talk about the problems before the contest is over, as it is cheating.

1. What is the value of $26 - 6 + 2 - 0$?

- (A) 22 (B) 24 (C) 26 (D) 28 (E) 30

2. How many sides does this shape have?



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

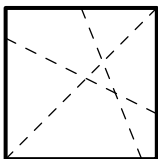
3. Which of these numbers is the smallest?

- (A) $3 - 0$ (B) $4 + 8$ (C) $6 - 2$ (D) $4 + 1$ (E) $5 - 3$

4. Which of these numbers has more even digits than odd digits?

- (A) 35 (B) 123 (C) 343 (D) 1086 (E) 1234

5. A square is cut along the 3 dashed lines in the picture below. How many pieces does the square get split into?



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

6. Taiki and Ryan are going to a restaurant. It takes 5 minutes to walk between their house and the restaurant. Karate tells them it will rain in 45 minutes. Taiki and Ryan walk to the restaurant, eat, and walk back to their house right before it starts raining. How many minutes were they at the restaurant?

- (A) 25 (B) 30 (C) 35 (D) 40 (E) 45

7. The pattern repeats as shown below.

$\triangle, \diamond, \circ, \square, \blacklozenge, \triangle, \diamond, \circ, \square, \blacklozenge, \dots$

What is the 26th shape?

- (A) $\diamond$ (B) $\square$ (C) $\blacklozenge$ (D) $\triangle$ (E) $\circ$

8. Anna, Betty, and Crocker share 18 cookies equally. Then each person eats 3 of their cookies. How many total cookies are left?



- (A) 9 (B) 10 (C) 12 (D) 14 (E) 15

9. Alice has twice as many marbles as Ben. Together they have 15 marbles. How many marbles does Alice have?

- (A) 5 (B) 6 (C) 9 (D) 10 (E) 12

10. Starting at 11:15, Ando worked on three worksheets, each taking 10 minutes. After he was done, he took a break for 25 minutes. What time was it at the end of Ando's break?

- (A) 11:50 (B) 11:55 (C) 12:00 (D) 12:05 (E) 12:10

11. For every 2 beads Karate has, he has 3 stars. Karate has 21 stars. How many beads does Karate have?

- (A) 12 (B) 14 (C) 16 (D) 18 (E) 20

12. Aya counts starting from 1. At some point, Kai stops her, adds the last three numbers that she said, and gets 51. What is the last number that Aya said?

- (A) 17 (B) 18 (C) 19 (D) 20 (E) 21

13. Karate goes to a store where one cupcake costs \$4 and one muffin costs \$5. By spending at most \$21, at most how many items could Karate buy?

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

14. Every three days, Karate writes in his diary. Every four days, Karate eats at a restaurant. Karate both wrote in his diary and ate at a restaurant on February 1. On which day will Karate next do both activities?
- (A) February 7 (B) February 10 (C) February 13
(D) February 19 (E) February 25
15. In another world, 1 glorp is equal to 7 beeps. Karate has 2 glorps and 5 beeps. Judo has 3 glorps and 4 beeps. After Karate and Judo put their money together, how many glorps and beeps do they have?
- (A) 4 glorps and 9 beeps (B) 5 glorps and 8 beeps
(C) 6 glorps and 2 beeps (D) 7 glorps and 1 beep
(E) 8 glorps and 5 beeps
16. Al, Bo, and Em each say a number. Al's number is twice the sum of Bo and Em's numbers. Which of these could be the sum of all 3 numbers?
- (A) 12 (B) 13 (C) 19 (D) 20 (E) 23
17. Taiki says it has been 5 days since Tuesday. Ryan says there have been 5 days from Tuesday to today, including Tuesday and today. Katherine says there are 5 days in between Tuesday and today. What day is it according to Taiki, Ryan, and Katherine in that order?
- (A) Sunday, Saturday, Monday (B) Sunday, Saturday, Sunday
(C) Sunday, Monday, Saturday (D) Sunday, Sunday, Sunday
(E) Saturday, Sunday, Monday
18. Karate can do exactly 20 hula hoop spins in 1 minute. Judo can do exactly 26 hula hoop spins in 2 minutes. Starting at the same time, how many total hula hoop spins can Karate and Judo do in 4 minutes?



- (A) 92 (B) 108 (C) 126 (D) 132 (E) 144

19. Taiki has a drawer full of shirts and pants, all of which are either red or blue. The drawer has 15 items, 6 of which are red. In addition, the drawer has 8 shirts and 5 blue pants. How many red shirts are there?

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

20. What is the fourth smallest whole number greater than 2026 that has exactly three 2s as digits?

(A) 2220 (B) 2221 (C) 2223 (D) 2224 (E) 2225

21. Karate wants to order the numbers 1, 2, 3, 4, and 5.

- He wants the number 4 to be the 4th number.
- He does not want the number 3 to be the 3rd number.
- He wants the number 2 to come right after the number 1.

How many ways can Karate order the numbers?

(A) 0 (B) 1 (C) 2 (D) 3 (E) 4

22. Albert counts starting from 1, but he reads his numbers one digit at a time. For example, he reads 37 as “three, seven.” The first time Albert says “zero, two,” what digit does he read after?

(A) one (B) two (C) three (D) four (E) five

23. In a line of people, 3 of whom are Karate, Judo, and Aki, there are exactly 3 people in front of Karate, exactly 5 people behind Judo, and exactly 9 people in front of Aki. Including Karate, Judo, and Aki, which of these is **not** a possible number of people in the line?



(A) 14 (B) 15 (C) 16 (D) 17 (E) 18

24. Karate has 5 blocks, as shown in the picture below.



He switches two of the blocks with each other, and then he again switches two of the blocks. Which of these could **not** be the new order of his blocks?

- (A)

A	B	C	D	E
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 (B)

D	B	A	C	E
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- (C)

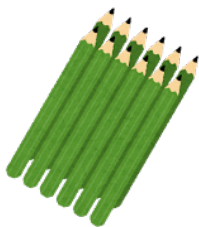
C	E	A	D	B
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 (D)

D	B	C	A	E
---	---	---	---	---
- (E)

B	C	A	D	E
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25. Tatsumi has 670 pencils that he must put into 26 boxes. Exactly 20 of the boxes must have exactly 26 pencils, and no two of the other 6 boxes can have the same number of pencils as each other. What is the smallest number of pencils that can be in the box with the most pencils?



- (A) 26 (B) 27 (C) 28 (D) 29 (E) 30



KMMC 2 B

DO NOT OPEN UNTIL SATURDAY, August 29, 2026

****Administration on an earlier date will disqualify your results.****

- All the information is not contained in the non-existent KMMC 2 Teacher's Manual. PLEASE READ THE MANUAL BEFORE SATURDAY, AUGUST 29, 2026.
- Please don't send the problems to someone else or talk about the problems before the contest is over, as it is cheating.
- Please submit your answers to the Quilgo form if you are taking the five-minute challenge mode.
- To take the traditional, 25-minute test, start the Quilgo and open the test link. You can just close out the Quilgo afterwards without submitting it. Instead, you have 25 minutes to send a private message on AoPS to **DeToasty3**, **pandabearcat**, and **pog**.

For more information about the KMMC 2 and our other competitions, please visit <https://pogyou.github.io>.

Questions and comments about this competition should be sent to:

DeToasty3, **pandabearcat**, **PandaMC**, and **pog**.

The KMMC 2 contest was written by the KMMC 2 Committee:

DeToasty3, pandabearcat, PandaMC, & pog