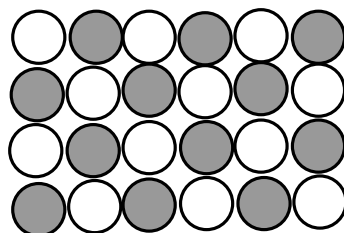


# 2025-2026 Junior Mathematical Olympiad

## Round One Examination (Grade 4) - 10:00am

For each question, determine the letter corresponding to the correct or best response; along with the question number, indicate this letter by shading it on the answer sheet.

1. Focus on the diagram below.



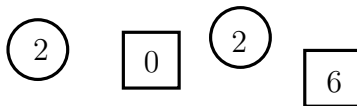
How many of the 24 circles are shaded?

- (A) 10    (B) 11    (C) 12    (D) 13    (E) 14
2. What is the value of  $6202 - 2026$ ?
- (A) 3176    (B) 4166    (C) 4176    (D) 4186    (E) 3166
3. The total of the six coins shown below is \$46. The two coins with the value \$? are the same in value.

$$\text{\$20} + \text{\$10} + \text{\$?} + \text{\$1} + \text{\$5} + \text{\$?} = \$46$$

What is the value of each of the \$? coins?

- (A) \$1    (B) \$5    (C) \$10    (D) \$15    (E) \$20
4. On mother's refrigerator there are four magnets with digits on them. The magnets are



What is the largest number that can be made using these magnets?

- (A) 2026    (B) 6202    (C) 2602    (D) 6220    (E) 5022

5. What is the value of

$$2 + 0 \times 2 + 6?$$

- (A) 0    (B) 8    (C) 10    (D) 12    (E) 24

6. The following 5 symbols are on 5 cards in the order shown



Two of the cards are taken up and the remaining three cards are pushed together without changing the order. What could the remaining 3 cards look like?

- (A) ♠△□    (B) ♣♠□    (C) □△♣    (D) ♠♠♣    (E) □♣△

7. Two turtles take part in a 40 m race. Each of them moves at a constant speed. When the first turtle covered 10 m, the second turtle covered only 7 m. How far from the finish line will the second turtle be when the first turtle finishes the race?

- (A) 8 m    (B) 9 m    (C) 10 m    (D) 12 m    (E) 15 m

8. In the addition shown below,  $x$  and  $y$  represent different single digits.

$$\begin{array}{r} 1 \ x \\ 2 \ x \\ + 3 \ x \\ \hline y \ 7 \end{array}$$

What is the value of  $x + y$ ?

- (A) 9    (B) 11    (C) 13    (D) 15    (E) 17

9. Which single digit, when placed in the three boxes, produce the correct result?

$$\square\square \times \square = 176$$

- (A) 3    (B) 4    (C) 5    (D) 6    (E) 8

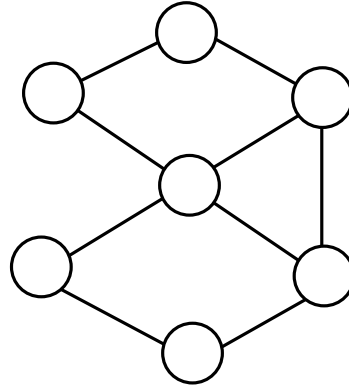
10. The largest two-digit multiple of 2 is  $x$  and the smallest two-digit multiple of 2 is  $y$ . What is the value of  $x - y$ ?

- (A) 2    (B) 48    (C) 52    (D) 88    (E) 96

11. Gina goes to the market every three weeks, which happens to be on Saturdays. The last time Gina went to the market was on May 12th. When is Gina's next market date?

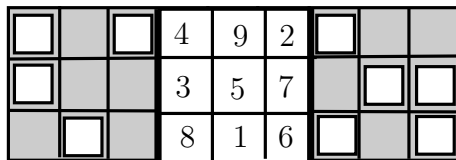
- (A) May 15th    (B) May 26th    (C) May 33rd    (D) June 2nd    (E) June 3rd

12. Hillary wants to paint all the circles in the diagram below. She wants to paint any 2 circles directly connected by a line with different colours.



What is the smallest number of colours she needs to complete her painting?

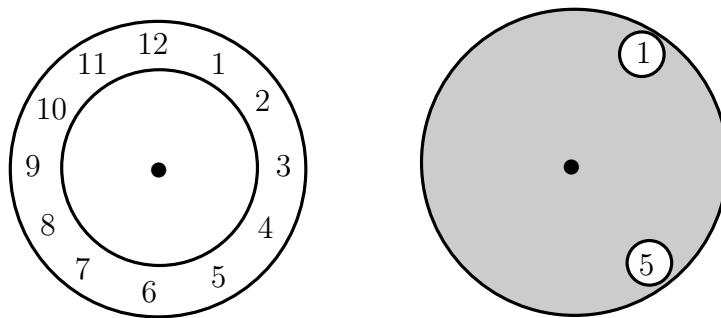
- (A) 2    (B) 3    (C) 4    (D) 5    (E) 6
13. What is the value of
- $$\frac{4444 + 5555}{1111 + 2222}?$$
- (A) 3    (B) 6.5    (C) 3.3    (D) 33    (E) 3333
14. Which of the following expressions, when simplified, is the smallest in value?
- $20 + 26$      $20 \div 26$      $26 - 20$      $20 \times 26$      $20^{26}$
- (A)  $20 + 26$     (B)  $20 \div 26$     (C)  $26 - 20$     (D)  $20 \times 26$     (E)  $20^{26}$
15. A piece of card with holes is folded along the thick black lines.



After folding, which number can still be seen?

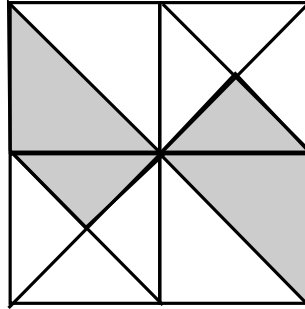
- (A) 2    (B) 3    (C) 4    (D) 5    (E) 6
16. Cameron and Shayne swim in their school's 25m pool. The time it takes Shayne to swim any 4 laps is the same it takes Cameron to swim any 3 laps. Last Monday, Cameron swam 36 laps. How many laps would Shayne swim in the time it took Cameron to complete his swim?
- (A) 27    (B) 32    (C) 40    (D) 44    (E) 48

17. Aisha starts watching a movie that is 2 hours and 45 minutes in length. If she starts watching at 8:45 a.m. and watches the movie all the way through without a pause or a break, at what time will the movie finish?
- (A) 10:30 a.m. (B) 11:15 a.m. (C) 11:30 a.m. (D) 10:50 a.m. (E) 10:45 a.m.
18. The sum of the ages of four friends, Xena, Zoe, Yoma and Willow, is 31. What will be the sum of their ages in 4 years' time?
- (A) 35 (B) 39 (C) 43 (D) 47 (E) 51
19. The diagram below shows the face of a clock and a grey circular card with two holes after placed on the clock-face. The numbers 1 and 5 are clearly shown.



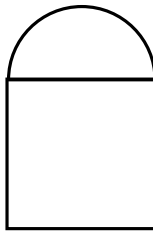
- Which of the following pairs of numbers could have been clearly shown if the grey card is rotated about its centre?
- (A) 4 and 9 (B) 2 and 10 (C) 5 and 10 (D) 6 and 9 (E) 7 and 12
20. Seven philanthropists each donate 5 million dollars to a charity organization. How much money do the seven philanthropists give in total?
- (A) \$5,000,000 (B) \$7,000,000 (C) \$35,000,000 (D) \$70,000,000 (E) \$3,500,000
21. Julie, Harry and Renae are friends and always go into the school bus together, according to the following rules:
- a) Julie never enters first
  - b) Harry never enters second
  - c) Renae never enters third
- In how many different ways can the three friends enter the school bus?
- (A) 1 (B) 2 (C) 3 (D) 4 (E) 6

22. The diagram below shows a large square which has been divided into four smaller squares. It also shows both diagonals of the large square and the two diagonals of two of the smaller squares.



Part of the large square is shaded. What fraction of the large square is shaded?

- (A)  $\frac{3}{16}$     (B)  $\frac{1}{4}$     (C)  $\frac{5}{16}$     (D)  $\frac{3}{8}$     (E)  $\frac{7}{16}$
23. A doctor told Mia to take one pill every 30 minutes. Mia took her first pill at 09:05. At what time did she take her third pill?
- (A) 9:35    (B) 10:05    (C) 10:35    (D) 11:05    (E) 11:35
24. The figure below consists of a semi-circle and a square as shown. The semi-circle can be coloured in either yellow or red, while the square can be coloured in either blue or green or pink.



In how many different ways can the figure be coloured?

- (A) 2    (B) 4    (C) 5    (D) 6    (E) 8
25. Lola jogs  $1\frac{1}{2}$  km in 20 minutes. Jogging at the same rate, how far can Lola jog in 4 hours?
- (A) 18 km    (B) 30 km    (C)  $22\frac{1}{2}$  km    (D) 15 km    (E)  $1\frac{1}{2}$  km