



2026 Spring Cup Mathematical Olympiad

Date: 28 February 2026

Time Given: 1 hour 30 minutes

Level: Primary 4

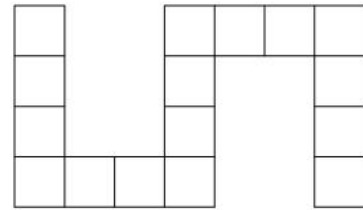
Name: _____

Instructions to Candidates

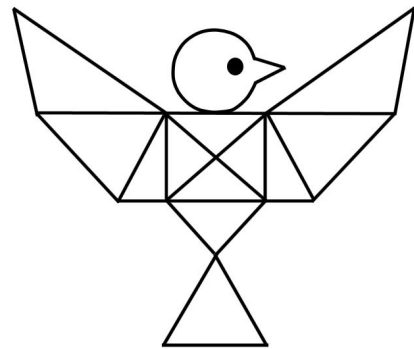
1. Do not open the booklet until you are told to do so.
2. Answer ALL 20 questions.
3. Write your answers in the answer sheet provided.
4. No steps are needed to justify your answers.
5. Questions 1-7 are worth 4 marks each.
6. Questions 8-14 are worth 6 marks each.
7. Questions 15-19 are worth 8 marks each.
8. Question 20 is worth 10 marks.
9. No marks will be deducted for wrong answers.
10. No marks will be given for unanswered questions.
11. No calculators or mathematical instruments are allowed.

1. Find the value of $(9 \times 8 \times 7 + 6 - 5) \times 4 + 3 \times 2 \times 1$.
2. There are several pears and several people. If each person gets 6 pears, there will be 12 left; if each person gets 7 pears, there will be 11 needed. How many people are there?
3. Clara is 4 years older than Daisy. Clara's age in 3 years will be twice Daisy's age 1 year ago. What is Daisy's age now?
4. Two trains, A and B, are traveling towards each other from two locations 770 kilometers apart. Train A travels at 45 km/h, while Train B travels at 41 km/h. Train B departs 2 hours before Train A. How many hours after Train A departs will it meet Train B?

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5. The figure below consists of 16 squares of equal size. If the area of this shape is 400 square centimeters, what is its perimeter in cm?

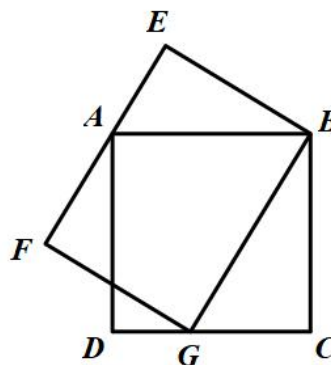


6. The figure below shows the 'Lucky Bird' design. How many triangles are there in this pattern?



7. In a class of 30 students, the average score for a Science test is 68. Two students, Daniel and Ethan, leave the class. The average score of the remaining students increases to 69. Find the average score of Daniel and Ethan?

10. As shown in the figure, the square ABCD has a side length of 8 cm, and the rectangle EBGF has a length of 10 cm. What is the width of the rectangle?

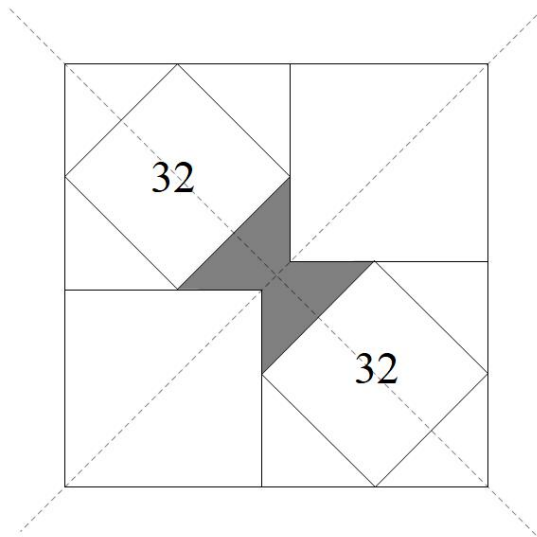


11. In the calendar of a certain month, there are more Fridays than Tuesdays and more Wednesdays than Saturdays. On which day is the 15th day of the month?

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12. A workshop needs to process 3960 parts. Three workers completed 1320 parts in 10 hours, with the remaining parts to be finished within 15 hours. Assume all workers work at the same rate, how many additional workers are required?

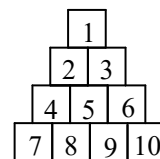
13. A and B are two prime numbers. Given that $A \times 5 + B \times 7 = 409$, find the value of $A + B$.

14. As shown in the figure, in a square with an area of 225, place four small squares to form a symmetrical figure with two lines of symmetry. Two squares with an area of 32 are marked and the other 2 squares are also the same. Find the area of the shaded region.



Questions 15 to 19 are worth 8 marks each.

15. The diagram shows 10 numbered rooms. You can move from a smaller-number room to an adjacent larger-number room, but not the other way around. How many distinct paths are there from room 1 to room 10(not necessary to pass through all room)?



16. As shown in the figure below, A~G represent the digit 1~7, the same letter represent the same digit, different letter represent different digits. Find the 4-digit number “ $\overline{ABCD}$ ”.

$$\begin{array}{r}
 A \quad B \\
 \times C \quad D \\
 \hline
 F \quad C \quad D \\
 E \quad A \quad E \\
 \hline
 E \quad G \quad A \quad D
 \end{array}$$

17. Alex write a sequence with 2 pattern as below, he can write any one pattern randomly, but he must finish writing before modifying the next pattern.
- (i) AAABAAC
 - (ii) AABBACC
- After he finished a whole number of patterns, he find there are 125 “A”s and 46 “B”s. Find the number of complete pattern of (i).

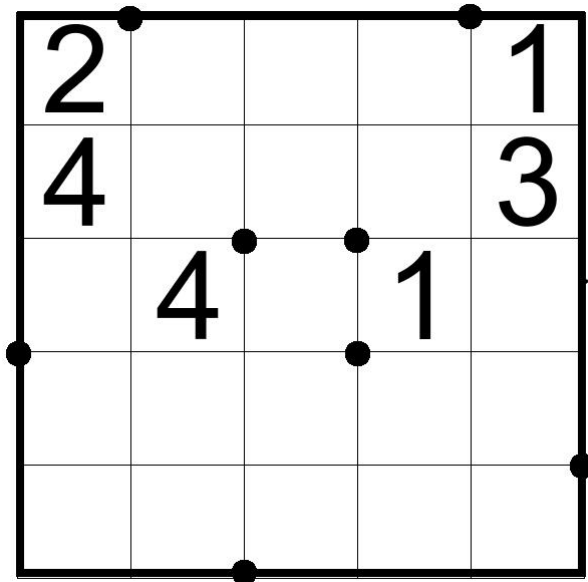
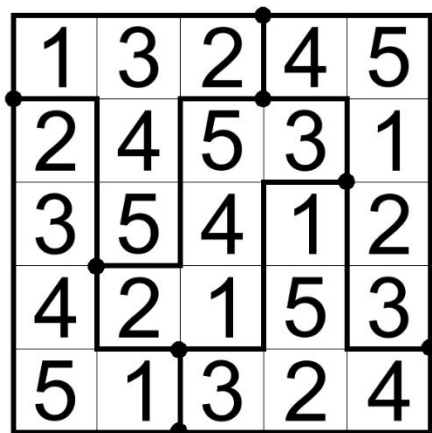
18. There are 12 lamps, each with one of three colors: red, yellow, or green. Allen, Benjamin, Cindy, and Daniel don't know the actual lighting status. The table below summarizes their color guesses for each lamp and the number of correct guesses:

number	1	2	3	4	5	6	7	8	9	10	11	12	correct guesses
Allen	Y	R	Y	G	R	R	G	Y	G	G	Y	R	6
Benjamin	Y	G	G	R	G	Y	Y	G	R	Y	R	Y	7
Cindy	R	G	Y	R	G	G	Y	Y	R	R	Y	Y	9
Daniel	G	Y	R	R	Y	R	R	G	R	Y	G	G	

Y - Yellow, R - Red, G - Green

Find the number of correct guesses of Daniel.

19. The figure below presents an irregular Sudoku puzzle, requiring each row, column, and irregular cell enclosed by thick lines to contain exactly one digit from 1 to 5. The black dots indicate all intersections within the grid where three thick lines intersect. In the lower right version, the thick lines between cells are omitted, but all black dots are clearly marked. Find the 5-digit number formed by the digits in the fifth row, arranged from left to right.



Question 20 is worth 10 marks.

20. In your opinion, from question 1 to 19, your favourite question is question _____ and the most difficult question is question _____.
- (As long as your answer is within 1 to 19, you get full marks, otherwise you get zero.)