

ASIA MATHEMATICS OLYMPICS (AMO)- KIDSBEE-OPEN

14th September 2025



Trial Round, “KIDS BEE” Level

Instructions

- Do not open this question booklet until you are told to do so.
- Write down your answers in the given spaces on the answer sheet.

Answers written outside of these spaces will not be counted.
- Questions related to the content or meaning of the problems are not allowed.

However, if you think there is a typing error in the question text, please raise your hand and tell a supervisor or a teacher.
- If you feel unwell at any time, please raise your hand and tell a supervisor or a teacher.
- You may not leave the examination room before time is up.
- When the exam time is up, you must stop writing immediately and leave your answer sheet on your desk before exiting the room.

Examination time 60 minutes

Organized in S.E.A by

[Question 1] “Trial Round Date”

September 14, 2025, is the day of the Asia Sansu Olympics 2025 Trial Round.

In the boxes below, insert either + or - to complete the equation.

$$20 \square 2 \square 5 \square 9 = 14$$

[Question 2] “Lining Up”

A team of young children lined up to visit the Science and Technology Museum.

Counting from the front of the line, Akira is the 20th person. Counting from the back of the line, Nobita is the 23rd person. The person in front of Akira is

Nobita.

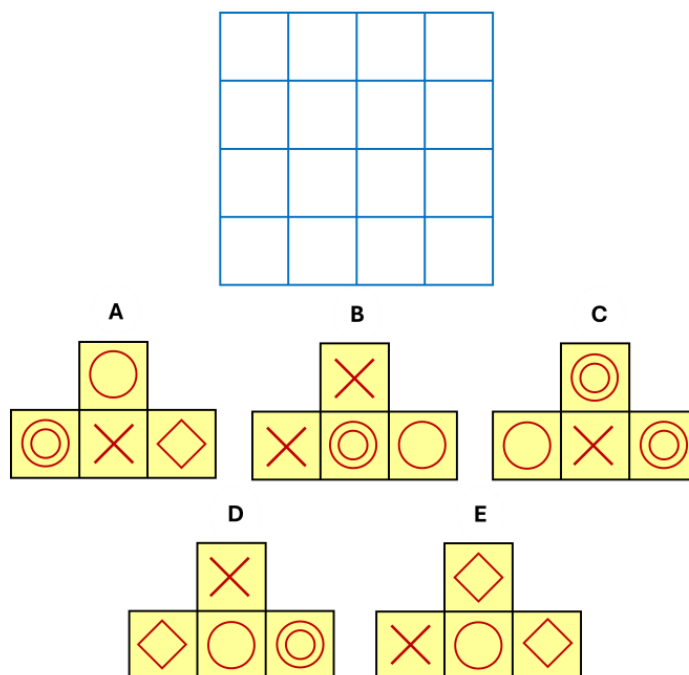
How many young children are in this team in total?

[Question 3] “Fitting Pieces”

Place the pieces (labeled A to E) into the grid so that the same symbols do not appear more than one time in any row ($\leftrightarrow$) or column ($\updownarrow$).

One piece will not be used.

Which piece (A, B, C, D, or E) is the leftover piece?



[Question 4] “The Case of the Magic Square”

Your Mission:

Your mission is to complete the Magic Square below by filling in the empty spaces in the grid while following the rules below.

		7	12
	4	9	
	5	16	3
8	11		

The Rules:

- The grid must be filled with the numbers from **1 to 16**.
- Each number can only be used **one time**.
- The sum of the four numbers in each row ($\leftrightarrow$), each column ($\updownarrow$), and each of the two main diagonals ($\nearrow \nwarrow$) must be the same number.

[Question 5] “Weight of the Balls”

There are eight balls, each with different weights: 1g, 2g, 3g, 4g, 5g, 6g, 7g, and 8g. No two balls have the same weight.

The balls are labeled with stickers: A, B, C, D, E, F, G, and H.

All balls, except for ball C, are placed on the scales, and they balance as shown in Figure 1 and Figure 2 below.

What is the weight of ball C in grams?

Figure 1

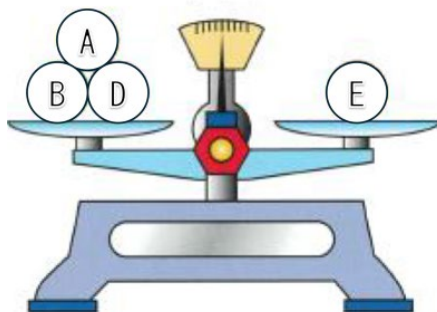
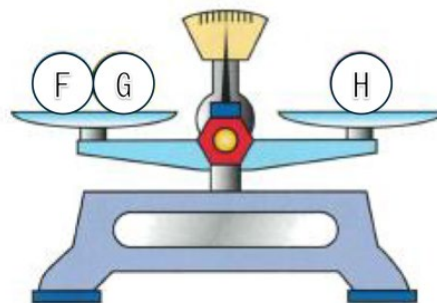


Figure 2



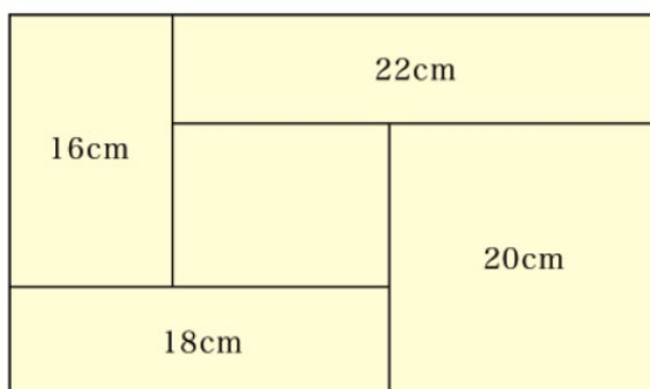
[Question 6] “Rectangles”

The figure below (Figure 1) shows a large rectangle divided into five smaller rectangles.

The number written inside each rectangle is its **perimeter** in cm.

What is the perimeter of the original large rectangle in cm?

Figure 1



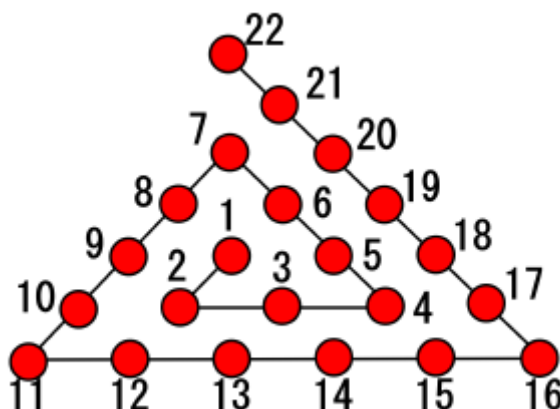
The figure below shows numbers organized in a triangular spiral.

The numbers at the turns (, ,) are special.

Let's call them **Corner Numbers**.

- The **1st** Corner Number is **2**.
- The **2nd** Corner Number is **4**.
- The **3rd** Corner Number is **7**.

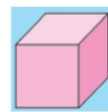
What is the number at the 10th corner?



[Question 8] “Viewing from Two Directions”

A shape was created using some cubic blocks. Figure 1 and Figure 2 show the same shape viewed from two different directions.

How many cubic blocks were used to build this shape?



Cubic block

Figure 1

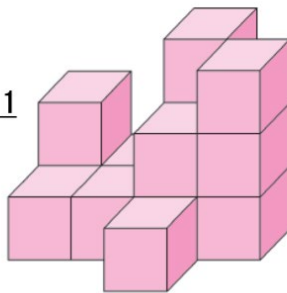
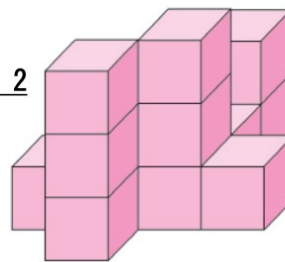


Figure 2



[Question 9] “Flipping Cards”

There are six cards. Each card is white on the front and black on the back.

At the start, all six cards are face up (white), as shown in Figure 1.

Then, players take turns flipping the cards. On each turn, the player **must** flip **exactly** 5 cards.

The **goal** is to make all six cards face down (black), as shown in Figure 2.

What is the minimum (the lowest) number of turns needed to reach the goal?

