# Year 1 and 2 (ENGLISH VERSION)

Saturday, 23rd March 2024 Time allowed: 60 minutes

1. For each question exactly one of the 5 options is correct.
2. Each participant is given 18 points at the beginning. For each correct answer 3, 4 or 5 points are added. No answer means 0 points are added. If a wrong answer is given, one quarter of the points is subtracted, i. e. 0.75 points, 1 point or 1.25 points, respectively. At the end, the maximum number of points is 90, the minimum is 0.
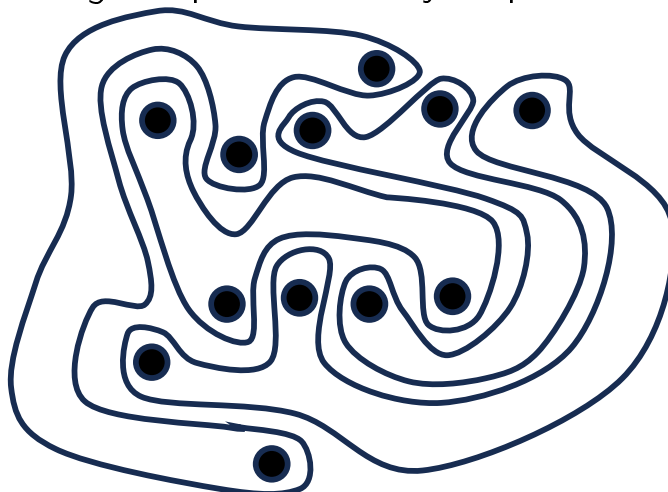3. Calculators and other electronic devices are not allowed.

3 point problems

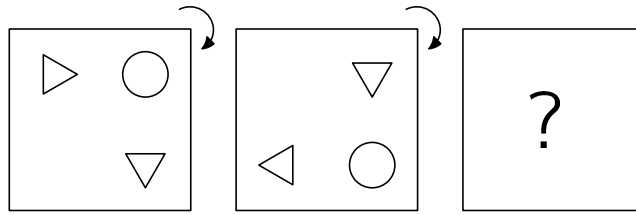**A1** Which number is inside the triangle, the square and the circle?
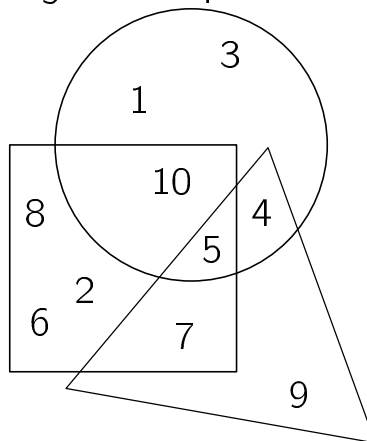
(**A**) 1 (**B**) 4 (**C**) 5 (**D**) 9 (**E**) 12

A2 The picture shows 4 strange shapes. How many shapes have 3 dots inside?

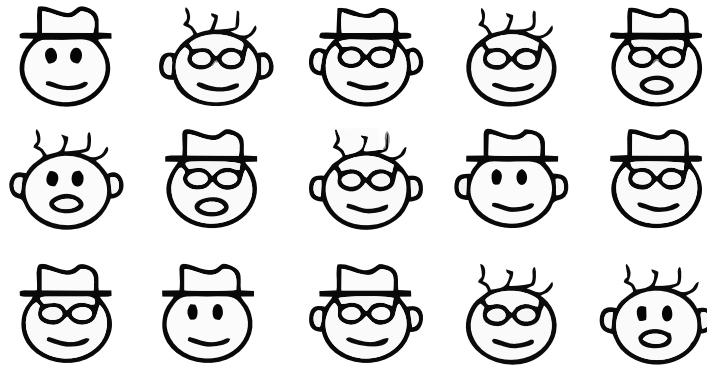(**A**) 0 (**B**) 1 (**C**) 2 (**D**) 3 (**E**) 4

A3 Rami puts a picture on the table.

He rotates the picture through a quarter turn, as shown. He then does the same rotation again. What does Rami see now?
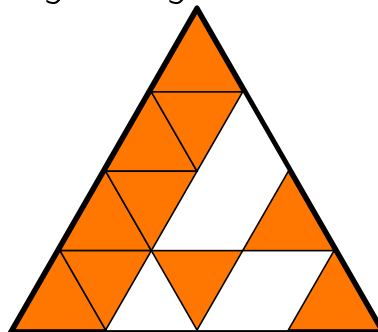

(A)　　　(B)　　　(C)　　　(D)　　　(E)

A4 In the picture, there are 8 different faces.

Each face appears twice, except for one. Which face appears only once?
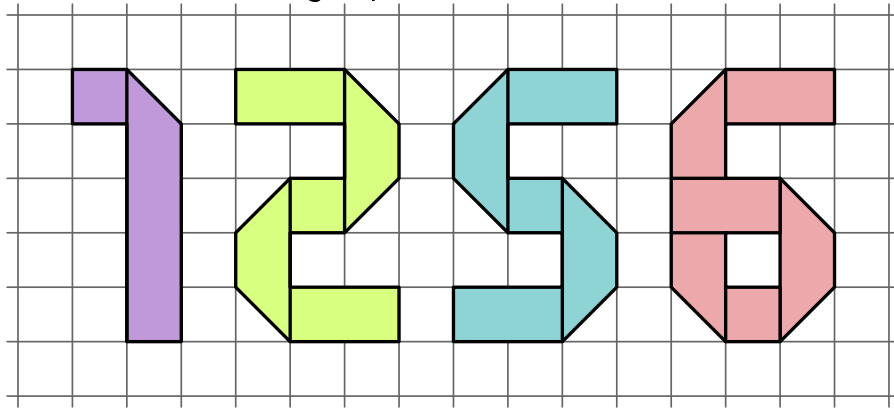
(A)　　　(B)　　　(C)　　　(D)　　　(E)

A5 Fatima is making this large triangle using identical small triangular tiles.

How many more tiles does Fatima need to complete the large triangle?

(A) 3 　　　　(B) 4 　　　　(C) 5 　　　　(D) 6 　　　　(E) 7
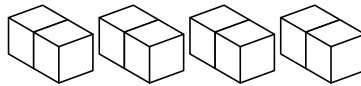
A6 Each number below is made using a piece of ribbon.

Which piece of ribbon is the longest?
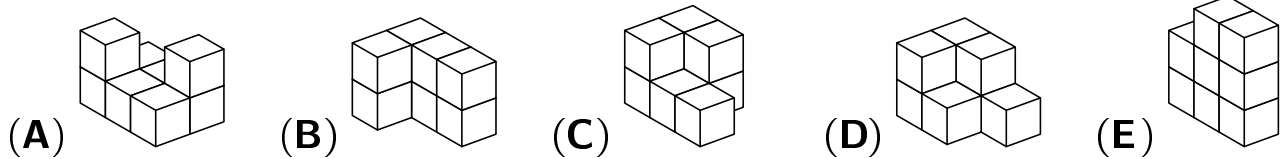
(**A**) 1   (**B**) 2   (**C**) 5

(**D**) 6   (**E**) They are all the same length.

4 point problems

B1 A student has 4 blocks, as shown.

Which of the following shapes cannot be made using these 4 blocks?

(**A**)   (**B**)   (**C**)   (**D**)   (**E**)

B2 Charbel has 5 baskets, each containing 4 toys.

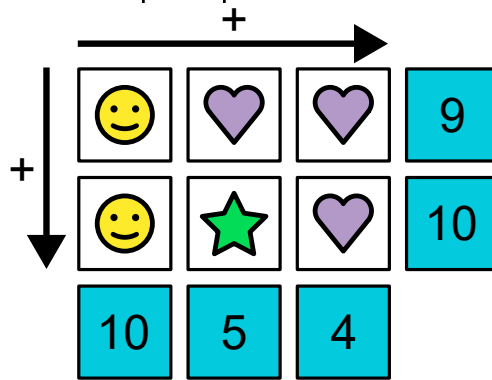| A | B | C | D | E |
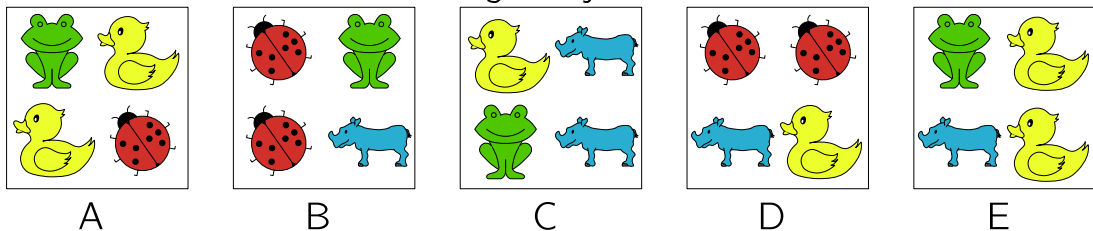
He dropped 4 of the baskets and the toys were mixed up.
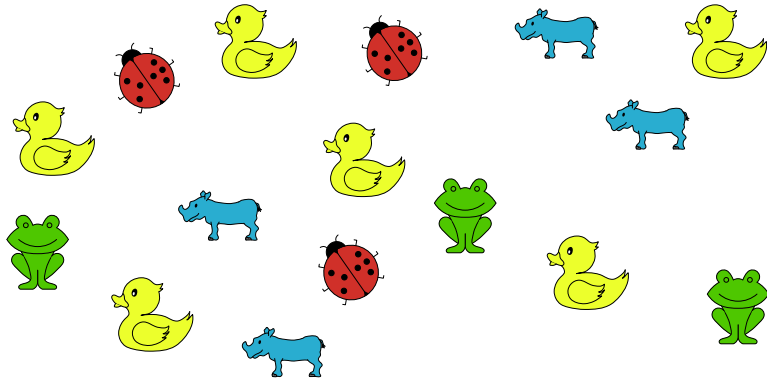
Which basket did he not drop?

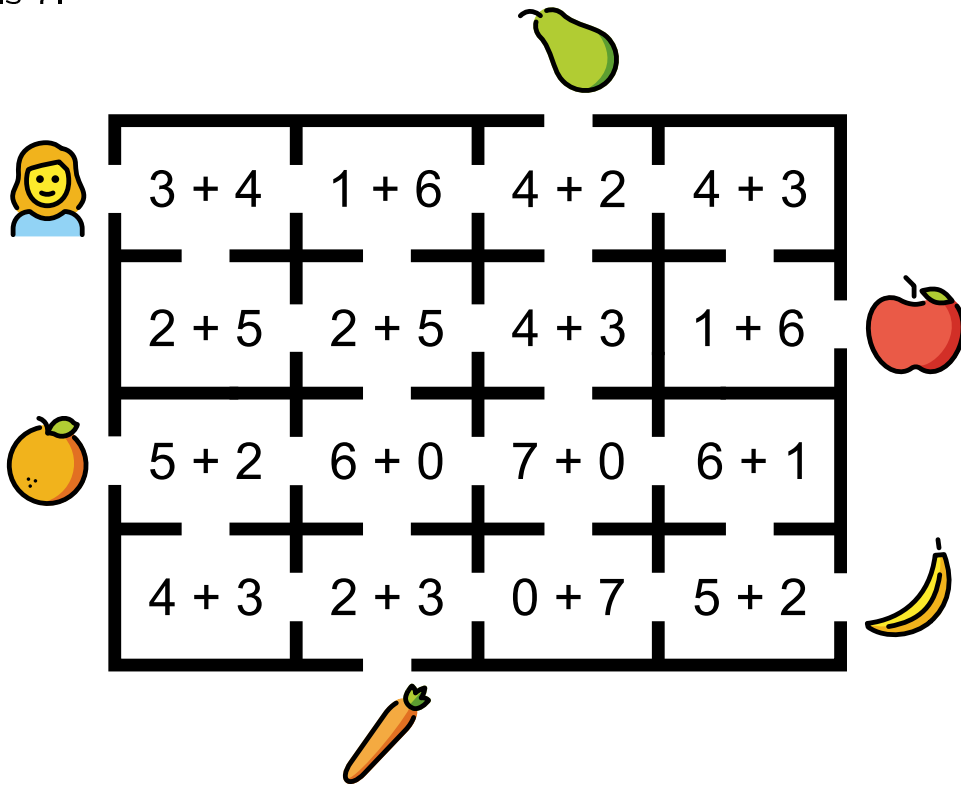(**A**) A   (**B**) B   (**C**) C   (**D**) D   (**E**) E

B3 In the following diagram, each shape represents a different value.

🙂	💜	💜	**9**
🙂	⭐	💜	**10**
10	**5**	**4**	

What is the value of ⭐?

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

B4 Nadia wants to walk through the maze so that she visits only rooms where the answer to the sum is 7.

3 + 4	1 + 6	4 + 2	4 + 3
2 + 5	2 + 5	4 + 3	1 + 6
5 + 2	6 + 0	7 + 0	6 + 1
4 + 3	2 + 3	0 + 7	5 + 2

Which object can Nadia reach?

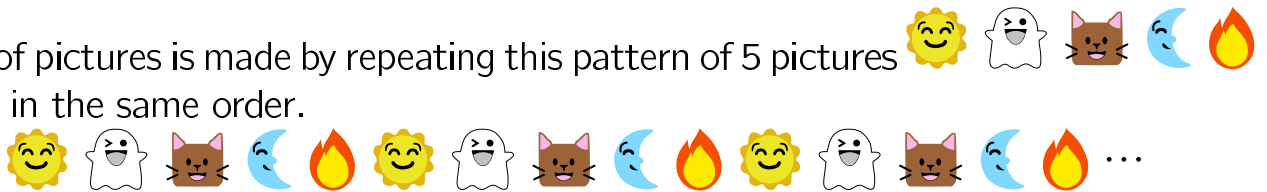(**A**) 🍌   (**B**) 🍊   (**C**) 🥕   (**D**) 🍐   (**E**) 🍎

B5 The sum of the numbers in the triangle should be twice the sum of the numbers in the circle.
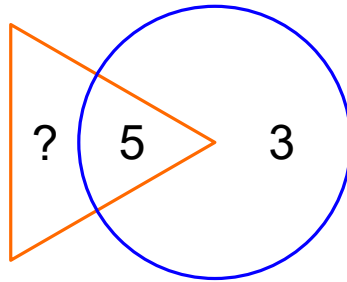
What number must replace the question mark?

(**A**) 3　　　　(**B**) 5　　　　(**C**) 8　　　　(**D**) 11　　　　(**E**) 16

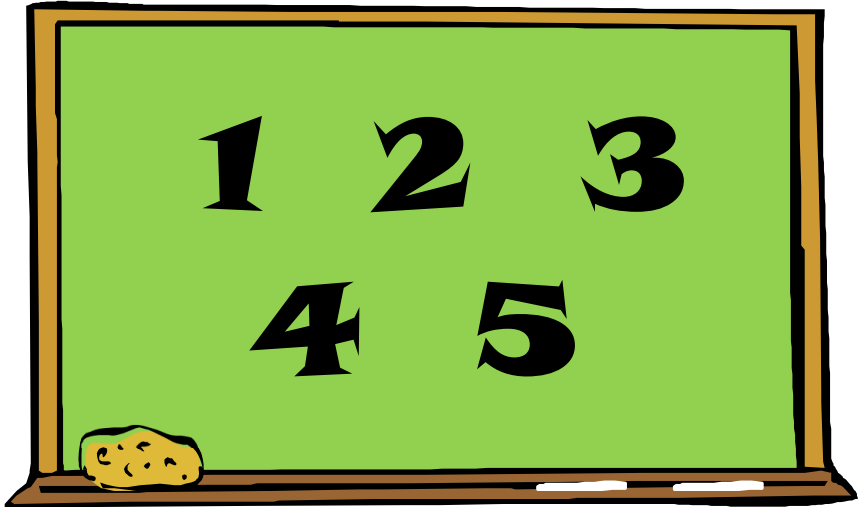**B6** A line of pictures is made by repeating this pattern of 5 pictures always in the same order.

Which picture is in the 27th position in the line?

(**A**)　　　　(**B**)　　　　(**C**)　　　　(**D**)　　　　(**E**)
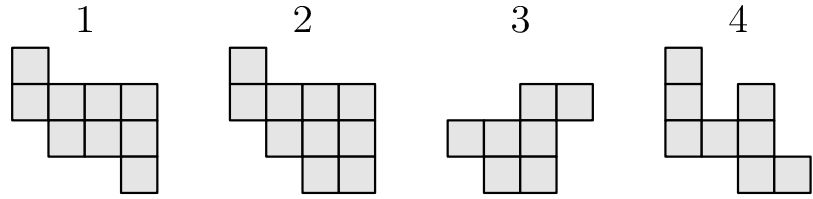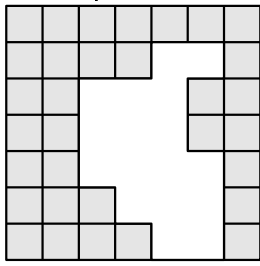
<center>5 point problems</center>

C1 Fadi wants to pick two numbers from the board and add them together.

How many different results could Fadi get?
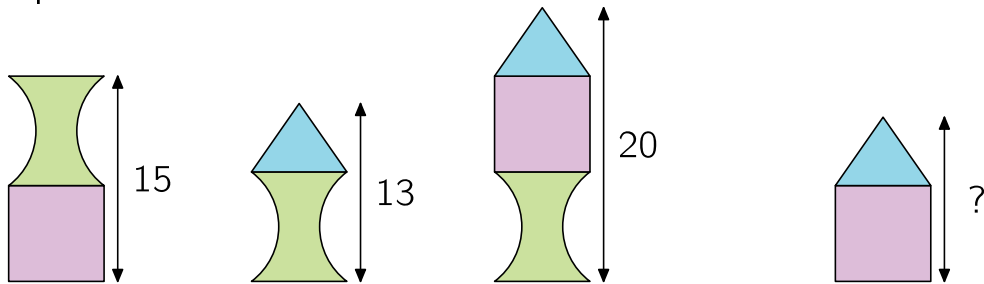
(**A**) 5　　　　(**B**) 6　　　　(**C**) 7　　　　(**D**) 8　　　　(**E**) 10

C2 Which two pieces can be used to complete the grid without overlapping?

1   2   3   4

(**A**) 1 and 2   (**B**) 1 and 3   (**C**) 3 and 4   (**D**) 2 and 4   (**E**) 2 and 3

C3 Samia builds towers from three types of blocks. The heights of three of them are shown in the picture.

15   13   20   ?

What is the height of the fourth tower?

(**A**) 12   (**B**) 13   (**C**) 14   (**D**) 16   (**E**) 17

C4 Zeina wants to move through the grid from A to B. She can only move to the right or upwards. Each time she visits a grey box, she has to pay 1 dollar. Each time she visits a white box, she has to pay 2 dollars. How much would she pay for the cheapest path?
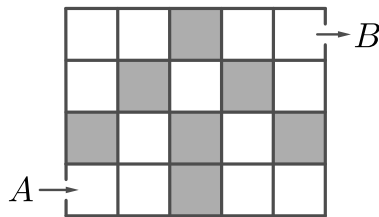
(**A**) 11 dollars   (**B**) 12 dollars   (**C**) 13 dollars   (**D**) 15 dollars   (**E**) 16 dollars

C5 One of the numbers in the picture is equal to the sum of the numbers connected directly to it. Which number is this?
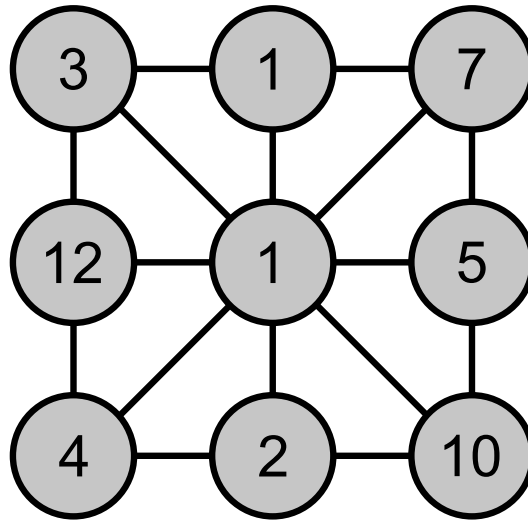
(**A**) 3 (**B**) 5 (**C**) 7 (**D**) 10 (**E**) 12

C6 Fadi was throwing darts at a target. He started with 10 darts and got 2 new darts each time he hit the target. In total, Fadi threw 20 darts and then had no darts left. How many times did Fadi hit the target?

(**A**) 4 (**B**) 5 (**C**) 6 (**D**) 8 (**E**) 10