

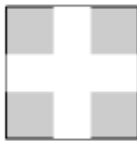
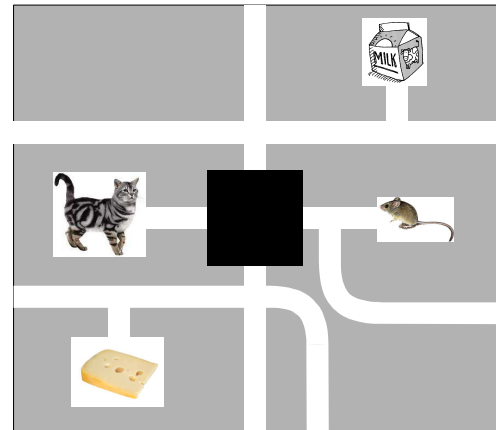
International Kangaroo Mathematics Contest 2010

Ecolier Level: Class (3 & 4)

Max Time: 2 Hours

3-point problems

Q1) There is a maze on the picture for a cat and a mouse. The cat can reach the bowl with milk, mouse can reach the cheese, but cat and mouse will never meet. How does the hidden part of the maze look like?



A)



B)

Q2) A 40 minutes lesson started at 11:50. Exactly at the middle of the lesson, a bird flew into the classroom suddenly. When did that happen?

A) 12:10

B) 12:20

Q3) Indian chief has three feathers, an axe, arrows and moccasins on feet. His son has two feathers, arrows, doesn't have an axe, he is barefooted and has two stripes drawn on his chest. Which picture shows the chief together with his son?



A)



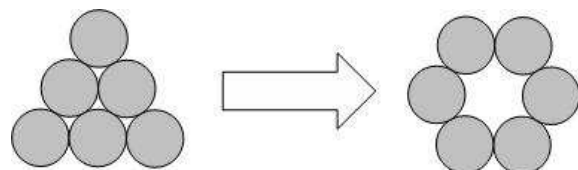
B)

Q4) In this restaurant, first course costs 4€, main course 9€ and dessert 5€. The Menu, which is first course + main course + dessert, costs 15€. How much does someone save if he orders the Menu instead of the three separate courses.

A) 3€

B) 4€

Q5) Six coins are lying in a triangle. You have to move some coins to place them in a circle as you can see in the second picture. How many coins must be moved at least?



A) 2

B) 3

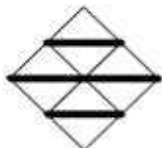
Q6) Four friends were eating ice-cream:

- Maria ate more than Faria,
- Jaweria ate more than Veena,
- Jaweria ate less than Faria.

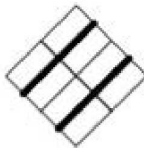
Which alternative lists the girls from the one who ate the most to the one who ate least?

- A) Maria, Jaweria, Veena, Faria B) Maria, Faria, Jaweria, Veena

Q7) Using only tiles like this , which of the following patterns would be impossible to construct if we want to cover the floor of a room?



A)

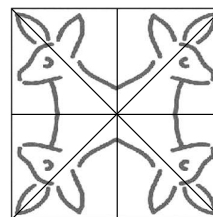


B)

Q8) Centipede Eve has 100 feet. Yesterday, she bought and put on 16 pairs of new shoes. In spite of that, 14 of her feet are still bare. On how many feet did she have shoes before the shopping?

- A) 54 B) 70

Q9) Mary folded and unfolded a paper four times as indicated by drawings. How many times did it happen that the Kangourous overlapped when the paper was folded?



- A) 2 B) 4

Q10) Mansoor and Sara are living in a skyscraper. Sara is living 12 floors above Mansoor. One day Mansoor went by stairs to visit Sara. On the half of his way he was in the 8th floor. In which floor does Sara live?

- A) 14 B) 16

Q11) A larger cube is made out of 64 little white wooden equal-sized cubes. Five sides of the larger cube are coloured green. How many cubes have 3 green sides?

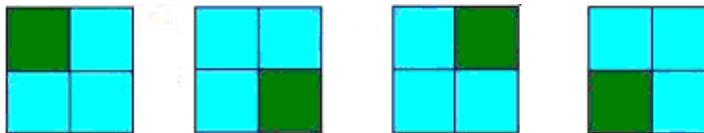


- A) 4 B) 8

Q12) A ferry can take either 10 small cars or 6 lorries through the river at one time. On Wednesday, it crossed the river five times, it was full and transported 42 vehicles. How many small cars did the ferry transport?

- A) 20 B) 30

Q13) A square is divided into 4 smaller equal-sized squares. All the smaller squares are coloured green or blue. For example, all four colorings on the drawing have the same colouring. How many different colourings are possible?



- A) 5 B) 6

Q14) Jamil starts a chainletter. He sends a letter to his friend Pervaiz. Pervaiz has to send the letter to 2 other people. Everyone who receives this letter, has to send it also to 2 other people. After 2 rounds in total $1 + 2 + 4 = 7$ persons have received the letter. How many persons in total have received this letter after 4 rounds?

- A) 16 B) 31

Q15) Children were measuring length of the sand playground by steps. Ali made 15 equal steps, Bisma 17, Dani 12 and Zoha 14. Whose steps were the longest ones?

- A) Bisma B) Dani

Q16) The product $60 \times 60 \times 24 \times 7$ equals

- A) the number of seconds in seven hours B) the number of seconds in one week

Q17) Two years ago, the sum of the ages of two cats Tony and Tiny was 15 years. Now Tony is 13 years old. In how many years will Tiny reach the age of 9 years?

- A) 3 B) 4

Q18) Camilla wrote all positive integers from 1 to 100 in sequence into a chart with 5 columns. There is a part of the chart on picture on the right. Her brother has cut a part of the table and than he has erased some numbers. Which picture represents part of the incomplete chart?

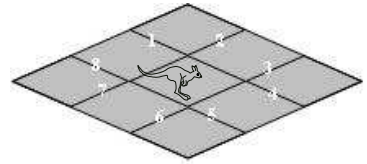
1	2	3	4	5
6	7	8	9	10
11	12	13	14	15
16	17	18	19	20

			69	
	72			

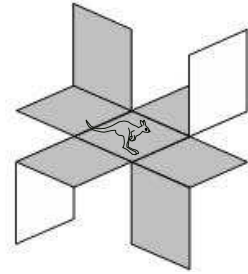
A)

	81			
	86			

B)



Q19) Some segments are numbered 1 , 2, ..., 8 as shown in the picture. Annie cuts along four of them, in order to bent the figure below. What is the sum of the numbers of the segments Annie has cut



- A) 20 B) 21

Q20) Each of Basit's friends added the number of the day and the number of the month of his birthday and obtained 35. Their birthdays are all different. What is the maximum possible number of Basit's friends?

- A) 8 B) 9