



Summer Round 2018./2019.

SCHOOL	
TEAM NUMBER	
CATEGORY	Year 5
COMPETITION COMMISSIONER	

no.	FIRST AND LAST NAME OF PARTICIPANT	YEAR	FIRST AND LAST NAME OF MENTOR
1.			
2.			

ANSWERS:

Year 5					
5.1.		5.4.		5.8.	
5.2.		5.5.		5.9.	
5.3.		5.6.		5.10.	
		5.7.		5.11.	
				5.12.	
				5.13.	
				5.14.	
				5.15.	

I ♥ MATematika

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CORRECT ANSWER: 10 POINTS**ANSWER „E“: 0 POINTS****ELSE: -2 POINTS**

5.1. How many axes of symmetry are there in an equilateral triangle?

0	B. 2	C. 3	D. None of the aforementioned	E. We do not wish to answer
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5.2. A circle made from paper cannot be cut into two:

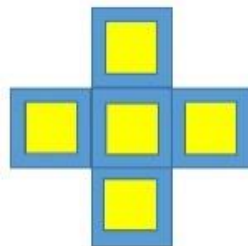
A. Semicircles	B. Circle segments	C. Annuli	D. Sectors	E. We do not wish to answer
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5.3. Which of the numbers below isn't divisible by 12?

A. 123456	B. 65432	C. 23568	D. 96420	E. We do not wish to answer
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CORRECT ANSWER: 20 POINTS**ANSWER „E“: 0 POINTS****ELSE: -4 POINTS**

5.4. As shown on the image, the figure consists of five yellow squares which were placed on top of five blue squares (the centres of the yellow squares are also the centres of the blue squares). How many axes of symmetry does the figure have?



A. 1	B. 2	C. 4	D. 3	E. We do not wish to answer
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5.5. If one of two supplementary angles is greater than the other one by 15° , what is the measure, in minutes, of the greater one of the two angles?

A. 4950	B. 5850	C. 9900	D. It cannot be determined	E. We do not wish to answer
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5.6. What is the sum of the first 13 multiples of number 13?

A. 1014	B. 1092	C. 1352	D. 1183	E. We do not wish to answer
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5.7. How many different cubes are there that have two purple faces and the rest of the faces are green?

A. 1	B. 2	C. 3	D. 5	E. We do not wish to answer
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CORRECT ANSWER: 30 POINTS ANSWER „E“: 0 POINTS ELSE: -6 POINTS

5.8. How many right-angled triangles are there whose lengths of legs are natural numbers, and their area is 100 cm²?

A. Less than 6	B. 6	C. 10	D. More than 10	E. We do not wish to answer
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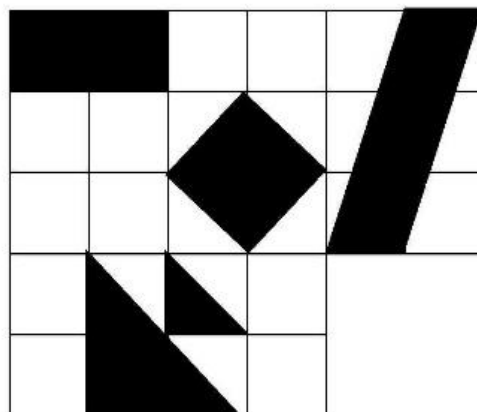
5.9. What is the sum of the digits of the greatest 5-digit number that is divisible by 3, 6 and 15?

A. 36	B. 18	C. 27	D. 45	E. We do not wish to answer
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5.10. How many pairs x and y , of different three-digit natural numbers exist, such that their sum is 630?

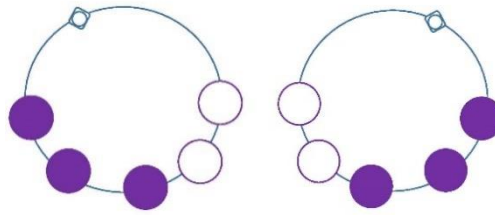
A. 214	B. 215	C. 530	D. 531	E. We do not wish to answer
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5.11. Which of the squares below needs to be added to the image so that the coloured area is equal to a half of the white area?



A. 	B. 	C. 	D. 	E. We do not wish to answer
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5.12. A girl is making a necklace with a clasp using three purple and two white beads. How many different necklaces can she make? Since the necklace can be turned over, the two necklaces on the image are equal.



A. 10	B. 5	C. 6	D. None of the aforementioned	E. We do not wish to answer
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5.13. If a three-digit number, whose digits are all equal, is multiplied by the a number made up of its last two digits, which of the digits cannot be the ones digit of the product?

A. 1	B. 2	C. 5	D. 6	E. We do not wish to answer
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5.14. In a hat, there are balls with numbers written on them, so that on each ball there is one factor of number 24. No two balls have the same number, and there are as many balls as there are factors of 24. Ivan drew four balls, and after that, Ante drew 3 balls. Before Ante drew the balls, Ivan was sure that the sum of numbers on Ante's three balls will be a multiple of number 3. Which of these statements is certainly correct?

A. Ivan drew the number 3	B. Ivan drew the number 4	C. The sum of Ivan's numbers is an even number	D. The sum of Ante's numbers is an even number	E. We do not wish to answer
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5.15. 15 equal matches need to be arranged (without breaking them) into a triangle. How many different triangles can be obtained?

A. 5	B. 6	C. 7	D. 8	E. We do not wish to answer
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