

## Winter Round 2019./2020.

| SCHOOL |  |
| :---: | :--- |
| TEAM NUMBER |  |
| CATEGORY |  |
| COMPETITION |  |
| COMISSIONER |  |


| NO. | FIRST AND LAST NAME OF <br> PARTICIPANT | YEAR | FIRST AND LAST NAME OF <br> MENTOR |
| :---: | :---: | :---: | :---: |
| 1. |  |  |  |
| 2. |  |  |  |

ANSWERS:

| YEAR 4 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| 4.1. | 4.6. | 4.13. |  |  |
| 4.2. | 4.7. |  | 4.14. |  |
| 4.3. | 4.8. |  | 4.15. |  |
|  | 4.9. |  | 4.16. |  |
|  |  | 4.17. |  |  |
|  |  | 4.18. |  |  |
|  | 4.19. |  |  |  |
|  | 4.20. |  |  |  |

## I MATematika

www.matzelcic.com.hr

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4.1. Jelena is celebrating her tenth birthday, and on her cake, there are 10 candles lit at the same time. If one candle burns out in 1 minute, how much time is needed for all the 10 candles to burn out?

| A. | B. | C. | D. | E. <br> 600 seconds | We do not wish <br> to answer |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

4.2. Which number is 4 times greater than double the value of number $100-15 \times 3$ ?

| A.  <br>  1020 | B. | C. | D. | E. We do not wish |
| :---: | :---: | :---: | :---: | :---: |
|  | 1992 | 960 | 440 | to answer |

4.3. There are 25 students from class $4 \mathrm{~A}, 27$ students from class $4 \mathrm{~B}, 23$ students from class $4 \mathrm{C}, 26$ students from class 4 D and 25 students from class 4E. They are all going on a fieldtrip, along with 9 teachers. If each bus has 44 seats, how many buses must the school arrange for the fieldtrip?

| A. | B. | C. | D. | E.We do not wish <br> to answer |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

## CORRECT ANSWER: 20 POINTS $\quad$ ANSWER ,E"*: 0 POINTS $\quad$ ELSE:-4 POINTS

4.6. Bubi the dog has a tail of length of 11 cm plus half of the tail's length. How long is Bubi's tail?

| A. | B. | C. | D. | E. <br> It cannot be <br> determined | We do not wish <br> to answer |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

4.7. When he opened the book, Thomas saw that the product of the page numbers on the left and right side is equal to 110. What is the sum of the page numbers of the two pages?

| A. | B. | C. | D. | E. <br> It cannot be <br> determined | We do not wish <br> to answer |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

4.8. Grandma has three sons and one daughter, and every son has 4 children. Grandma's offspring made a deal that, for her $80^{\text {th }}$ birthday, each of the children will give her 2 roses and each of her grandchildren will give her one rose. How many roses will grandma get for her $80^{\text {th }}$ birthday?

| A. | B. | C. | D. | E. We do not wish |
| :---: | :---: | :---: | :---: | :---: |
| 20 | 18 | 24 | 80 | to answer |

4.9. Year 4 students collected chesnuts on a fieldtrip, and 4 A students found $386,4 \mathrm{~B}$ students found $402,4 \mathrm{C}$ students found 399 and 4D students found 411 chesnuts. What is the least number of chesnuts they must collect if they want to evenly divide them into 8 equal groups?

| A. | B. | C. | D. | E. We do not wish |
| :---: | :---: | :---: | :---: | :---: |
| 10 | 12 | 4 | 2 | to answer |

4.13. Marija decided to save money and on the first day, she put 12 kn in her piggy bank. Grandma wanted to help Marija and she promised to give her twice the amount of money that she has in the piggy bank at that moment, each time Marija sweeps her yard. How many times must Marija sweep grandma's yard if she wants to save more than 400 kn?

| A. | B. | C. | D. | E. <br> We do not wish <br> to answer |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

4.14. Bruno is 126 cm tall, Tomo and Janko are 130 cm tall, Marin is 129 cm , Nera and Tihana are 175 cm and Ivana is 159 cm . In how many ways can they stand in line if they have to line up in order by height, shortest to tallest?

| A. | B. | C. | D. | E. <br> We do not wish <br> to answer |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

4.15. In the cake shop, a chesnut cake costs 15 kn , and chesnut puree costs 20 kn . How many pieces of chesnut cake did mum buy if she spent 85 kn on chesnut cakes and chesnut purees?

| A. | B. | C. | D. | E. <br> It cannot be <br> determined | We do not wish <br> to answer |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

4.16. The quadrilateral shown in the figure will be divided into many parts by cutting on the bolded lines. How many different shapes will we have after cutting?


| A. | B. | C. | D. | E.We do not wish <br> to answer |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |

4.17. We add the greatest one-digit number to the smallest four-digit number, and we double the result. By how much is the number we got greater than the greatest three-digit number?

| A. | B. |  | C. | D. | E.We do not wish <br> to answer | 1019 |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

4.18. Mary has 18 carrots and she wants to give them to her bunnies. If Mary has 4 bunnies (Miki, Tiki, Siki, and Ziki), and wants to give each at least 4 carrots, in how many ways can she give all 18 carrots to her bunnies?

| A. | B. | C. | D. <br> None of the <br> aforementioned | E.We do not wish <br> to answer |
| :--- | :--- | :--- | :--- | :--- | :--- |

4.19. The chocolate weighs 200 g and it broke into two parts as shown in the image. By how many grams is the bigger part of the chocolate heavier than the smaller part?


| A. 35 g | B. | C. | D. | E. <br> None of the <br> aforementioned | We do not wish <br> to answer |
| :--- | :--- | :--- | :--- | :--- | :--- |

4.20. Katherine wishes to draw a figure as shown in the figure in one move, that is, so that she doesn't lift her pen from the paper and that she doesn't draw the same line twice. From how many of the given 6 points can she start drawing, to be able to do this?


| A. | B. | C. | D. | E.We do not wish <br> to answer |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

