



Spring Round 2019./2020.

SCHOOL	
TEAM NUMBER	
CATEGORY	Year 3
COMPETITION COMMISSIONER	

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

ANSWERS:

Year 3					
3.1.		3.6.		3.13.	
3.2.		3.7.		3.14.	
3.3.		3.8.		3.15.	
		3.9.		3.16.	
				3.17.	
				3.18.	
				3.19.	
				3.20.	

I ♥ **MAT**ematika

www.matzelcic.com.hr

Author: Maja Zelčić, mathematics professor
 Translator: Sofija Čubrić, mag. educ. math. et inf.

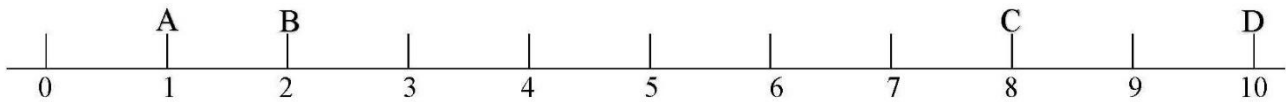
Revision: Biljana Gaš, mag. prim. educ.
 Milena Laco, dipl. učit.

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

3.1. When the sum of numbers 12, 7 and 10 is increased 5 times, which number do we get?

A. 145	B. 135	C. 155	D. 140	E. We do not wish to answer.
------------------	------------------	------------------	------------------	-------------------------------------

3.2. How many units are contained in the segment \overline{AC} ?



A. 1	B. 6	C. 7	D. 8	E. We do not wish to answer.
----------------	----------------	----------------	----------------	-------------------------------------

3.3. Which of the given answers is not equal to $2+2+2+2+3+3+4+4+4+4+5+5+5+6+6$?

A. $(3+6) \times 2 + 6 \times 4 + 5 \times 3$	B. $9 \times 2 + 6 \times 4 + 5 \times 3$	C. $9 \times 2 + (2+4) \times 4 + 5 \times 3$	D. $8 \times 2 + (2+4) \times 4 + 5 \times 3$	E. We do not wish to answer.
--	--	--	--	-------------------------------------

CORRECT ANSWER: 20 points	ANSWER „E“ : 0 POINTS	ELSE: -4 POINTS
----------------------------------	------------------------------	------------------------

3.6. If Ana doesn't love Boris, Boris doesn't love Dubravka, and Dubravka doesn't love Mate, who does Mate not love?

A. Ana	B. Boris	C. Dubravka	D. It cannot be determined.	E. We do not wish to answer.
------------------	--------------------	-----------------------	---------------------------------------	-------------------------------------

3.7. The road Korina travels from school to home has the length of 150 m 150 cm and 150 mm. Dino's road from home to school is 555 cm longer. How long is Dino's road from home to school?

A. 755 m 150 cm	B. 157 m 20 cm	C. 150 m 705 cm 15 mm	D. 157 m 155 cm	E. We do not wish to answer.
---------------------------	--------------------------	---------------------------------	---------------------------	-------------------------------------

3.8. Tina has a birthday on a Thursday this year. On which day of the year does Tena have a birthday this week, if Tena is 52 days younger than her?

A. Monday	B. Tuesday	C. Wednesday	D. Sunday	E. We do not wish to answer.
---------------------	----------------------	------------------------	---------------------	-------------------------------------

3.9. Write the smallest three digit number that has a 4 as its first digit, and there is no remainder when it is divided by

3. What is the sum of the ones and the hundreds digit??

A. 6	B. 5	C. 4	D. 3	E. We do not wish to answer.
----------------	----------------	----------------	----------------	-------------------------------------

CORRECT ANSWER: 30 points

ANSWER „E“ : 0 POINTS

ELSE: -6 POINTS

3.13. How many three-digit numbers less than 500 such that the product of their digits is 8 are there?

A. 8	B. 6	C. 9	D. 7	E. We do not wish to answer.
----------------	----------------	----------------	----------------	-------------------------------------

3.14. Points M , N , O and P are on the same line. If we know that:

- the distance from point O to point M is 14 units,
- the distance from point O to point P is 17 units,
- points O and P are on different sides of point M on the line,
- the distance from point N to point M is 10 units and
- the distance from point P to point N is 13 units,

what is the distance from point O to point N ?

A. 24 units	B. 4 units	C. 7 units	D. It cannot be determined.	E. We do not wish to answer.
-----------------------	----------------------	----------------------	---------------------------------------	-------------------------------------

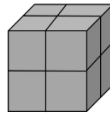
3.15. All of Marta's books are of the same weight. There are two books in her bag. If Marta places six more books into her bag, the bag will be three times heavier. Which of the following statements is true?

A. The bag is as heavy as a book.	B. The bag is as heavy as two books.	C. The bag is as heavy as three books.	D. The bag is as heavy as four books.	E. We do not wish to answer.
---	--	--	---	-------------------------------------

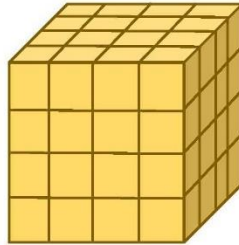
3.16. Four oranges weigh as much as six lemons, which weigh as much as three grapefruits. Which of the following is not true?

A. Two oranges are heavier than one grapefruit.	B. Two lemons weigh as much as one grapefruit.	C. Two oranges are lighter than one grapefruit. .	D. Two oranges weigh as much as three lemons.	E. We do not wish to answer.
--	---	--	--	-------------------------------------

3.17. Ivica made a cube using 8 grey cubes, as shown:



After that, he built around the grey cube using yellow cubes and the resulting cube is shown:



How many yellow cubes did he use?

A. 64	B. 96	C. 56	D. 88	E. We do not wish to answer.
-----------------	-----------------	-----------------	-----------------	-------------------------------------

3.18. Leo decided to climb to the top of Medvednica twice during the work week (from Monday to Friday). If he can do this twice in one day, or on two different days, how many different choices of days to go climbing does he have?

A. 5	B. 10	C. 15	D. 20	E. We do not wish to answer.
----------------	-----------------	-----------------	-----------------	-------------------------------------

3.19. Robert wrote all the numbers from 13 to 130:

13, 14, 15, ..., 128, 129, 130.

How many times did Robert write the digit 3?

A. 20	B. 21	C. 22	D. 23	E. We do not wish to answer.
-----------------	-----------------	-----------------	-----------------	-------------------------------------

3.20. Out of 24 students in Year 3, five of them were absent on Friday. 13 of them got a 5 from guided reading, and 16 of them got a 5 from obstacle jumping. How many of the students got two 5s that day: from guided reading and obstacle jumping?

A. at least 5	B. at least 10	C. at most 10	D. It cannot be determined.	E. We do not wish to answer.
-------------------------	--------------------------	-------------------------	---------------------------------------	-------------------------------------