

## Instructions:

1. Do not open this booklet until you are told by your teacher to begin.
2. Materials: pencil, paper - no other materials. NO calculators!
3. You will have exactly 40 minutes to work on the contest.
4. This is a multiple-choice contest. Each question is followed by five possible answers marked A, B, C, D, and E. Only one of the options is correct. After making your choice, fill it in the appropriate circle on the response form.
5. This form has 7 questions in Part A, 7 questions in Part B, and 4 questions in Part C.
6. Scoring:

- Each correct answer is worth:
-3 points in Part A,
- 4 points in Part B,
-6 points in Part C.
- Each unanswered question is worth 1 point.
- Incorrect answers are worth 0 points.


## Part A (3 points each)

1. Michelle drew a circle inside a triangle, and then a square inside the circle. How many straight lines did she use to make all the shapes?
(A) 2
(B) 3
(C) 4
(D) 7
(E) 8
2. How many pairs of legs do the rabbits in the picture have altogether?

(A) 3
(B) 6
(C) 7
(D) 12
(E) 14
3. There are 17 Grade 1 students in line to get into Mr. Merrick's classroom. Six are in front of Aliyana. How many Grade 1 students are behind Aliyana?
(A) 8
(B) 9
(C) 10
(D) 11
(E) 12
4. With $\$ 8$ you can buy one avocado. Two carrots cost the same as one avocado. A carrot costs as much as eight cherries. How much does a cherry cost?

(A) $\$ 0.25$
(B) $\$ 0.50$
(C) $\$ 1$
(D) $\$ 2$
(E) $\$ 4$
5. Which of the following gives the largest answer?
(A) $1+2 \times 3+4$
(B) $1+2+3+4$
(C) $2+3+1 \times 4$
(D) $4 \times 3-2-1$
(E) $2-1+3 \times 4$
6. Three oranges cost $\$ 8$. Sunny paid $\$ 56$ for some oranges. How many oranges did she buy?
(A) 7
(B) 8
(C) 18
(D) 21
(E) 24
7. Eight identical carrots weigh 200 g together. How much do 3 identical carrots weigh?
(A) 20 g
(B) 25 g
(C) 50 g
(D) 75 g
(E) 100 g

## Part B (4 points each)

8. Which image represents the reflection of the rabbit in the mirror?

## mirror


(A)

(B)

(C)

(D)

(E)

9. James and Arin eat some kiwis. Arin eats twice as many as James eats. Together, the two of them eat 72 kiwis. How many does James eat?
(A) 24
(B) 36
(C) 48
(D) 70
(E) 144
10. What is the smallest number that when multiplied by 7 gives a 3 -digit number?
(A) 7
(B) 14
(C) 15
(D) 93
(E) 100
11. In the picture you see the footprints of a cat, a penguin, and a grizzly bear. How many toes do 3 cats, 5 penguins, and 2 grizzly bears have altogether?

(A) 74
(B) 98
(C) 104
(D) 118
(E) 124
12. What is the difference between the largest 3-digit number and the smallest 3-digit number, that can each be made using all the numbers shown on the die below, so that each number has no repeating digits?

(A) 18
(B) 204
(C) 396
(D) 404
(E) 531
13. Renert Rabbit used 18 matchsticks to put around a square and a rectangle made of 4 tiles. How many matchsticks will he need to put around two different rectangles made of 6 tiles?

(A) 20
(B) 22
(C) 24
(D) 26
(E) 28
14. Thirty-four people ran in a race. The number of people who finished before Aaron is twice the number of the people who finished after him. In what place did Aaron finish the race?
(A) 22
(B) 23
(C) 24
(D) 25
(E) 26

## Part C (6 points each)

15. The display on a digital clock shows $10: 52$. The digits are all different. What is the shortest amount of time that needs to pass until you see the same four digits again on the clock?

$$
10: 52
$$

(A) 27 minutes
(B) 73 minutes
(C) 118 minutes
(D) 250 minutes
(E) 268 minutes
16. It takes 24 seconds to cut a 6 -meter log into three 2 -meter pieces. How many seconds will it take to cut a 6 -meter log into six 1 -meter pieces?

(A) 36
(B) 40
(C) 48
(D) 60
(E) 72
17. Ms. Marina's birthday is in December and Mr. Vlad's birthday is in February. On March 14 2022, Ms. Marina added the year when she was born to her age, and she got 2021. Mr. Vlad and Ms. Doina did the same and each got 2022. Which of the following could be Ms. Doina's birthday month?
(A) January
(B) May
(C) August
(D) October
(E) December
18. Jaxon, Braden, and Calvin each created 3D shapes by connecting cubes.



Braden


Calvin

They decided to put their shapes together to create a bigger shape. Below are five different bigger shapes, all using 10 cubes. Which of them CANNOT be made by combining their three pieces?
(A)

(B)

(C)

(D)

(E)


