



Spirit of Math[®]

Releasing the Genius[®]

IN COLLABORATION WITH



Developed by

Stanford
University

GRADE 3

Spirit of Math International Contest 2020

In collaboration with SMILE developed by Stanford University

INSTRUCTIONS

1

You have **45 minutes** to write the contest.

2

The contest is multiple-choice with four choices for each question.

3

Write the CAPITAL letter of the answer you choose on the line to the right of each question and fill in the corresponding circle on the SoM Answer Sheet.

4

Each question answered correctly is worth one mark, and the sum of the correct answers is the score.

5

Marks are not taken off for wrong answers.

6






No calculators or other counting tools are allowed.

Student Name:

Score:

/30



- 1) $16 + 3 + 11 + 4 + 9 + 7 = ?$
A) 40 B) 46 C) 50 D) 60 _____
- 2) What is the next item in line?

A)  B)  C)  D)  _____
- 3) Celia saw five dogs at the park. How many legs did she see?
A) 5 B) 10 C) 15 D) 20 _____
- 4) The sum of 198 and 301 is closest to which of the following?
A) $100 + 200$ B) $100 + 300$ C) $200 + 300$ D) $300 + 300$ _____
- 5) What two numbers come next in this pattern: 2, 4, 6, 8, _____, _____
A) 9, 10 B) 9, 11 C) 10, 12 D) 12, 14 _____
- 6) $4 \times 3 \div 12 \times 2 = ?$
A) 1 B) 2 C) 4 D) 8 _____
- 7) There are 30 carrots to share among 10 students. If everyone receives the same number of carrots, how many does each person receive?
A) 3 B) 5 C) 6 D) 10 _____

Space for rough work

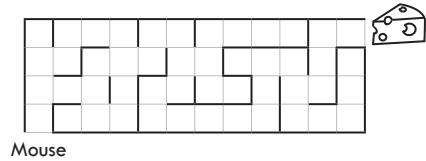
- 8) During class, Peter made a T-shirt with his name on it. He went to check his T-shirt in the mirror. Which of the following images shows what Peter saw in the mirror?
A) **Peter** B) **Ɔɹɹɹ** C) **Ɔɹɹɹ** D) **ɹɹɹɹ** _____
- 9) The word 'level' is a palindrome because it can be read the same way forwards and backwards. Which of the following numbers is also a palindrome?
A) 11234 B) 14241 C) 122121 D) 234132 _____
- 10) It takes 25 minutes for Jocelyn to walk to the bus stop. What time should she leave her house to arrive at the bus stop at 9:55 a.m.?
A) 9:30 a.m. B) 9:35 a.m. C) 9:42 a.m. D) 9:45 a.m. _____
- 11) Charmaine bought one dozen cookies. Denton bought twice as many cookies as Charmaine. How many cookies did Denton buy?
A) 6 B) 12 C) 24 D) 48 _____
- 12) Janis was running a 5 km marathon. Just before the finish line, she sprinted past Alex, who was in 3rd place, and happily crossed the finish line without passing anyone else. What place did Alex finish in the marathon if he was right behind Janis?
A) 1st B) 2nd C) 3rd D) 4th _____
- 13) In the Math Rocks Collection, each rock weighs three kilograms more than the previous rock. The first rock weighs 3 kg. How much does the fourth rock weigh?
A) 6 kg B) 8 kg C) 9 kg D) 12 kg _____

Space for rough work

14) Which of the following options has the greatest total number of sides?
 A) 3 squares B) 2 hexagons C) 3 pentagons D) 4 triangles _____

15) Reese had 20 tomato slices for her pizza toppings. She wanted to put all but 12 tomato slices on her pizza. How many tomato slices are on her pizza?
 A) 8 B) 10 C) 12 D) 32 _____

16) The mouse passes many square tiles to get to the cheese. How many square tiles make up the shortest route to the cheese?
 A) 24 B) 25 C) 26 D) 27 _____



17) Ruth collects shells at the shore. Every day, she collects twice the number of shells as the previous day and puts them in her treasure box. If she found 160 shells on the 5th day, how many shells did she find on the 2nd day?
 A) 10 B) 20 C) 40 D) 80 _____

18) Francis has 2 star fruit trees, 2 durian trees, and 2 papaya trees. Francis picked 6 star fruits from each star fruit tree, 4 papayas from each papaya tree, and only one durian fruit. How many pieces of fruit did Francis pick?
 A) 11 B) 17 C) 21 D) 22 _____

Space for rough work

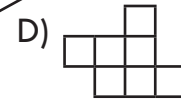
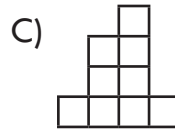
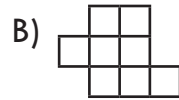
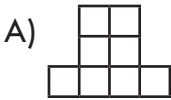
- 19) Sarah got an average of 32 out of 40 on her first 5 math drills. What does she need to score on her 6th drill to get an overall average of 33 out of 40?
A) 33 B) 35 C) 38 D) 40 _____
- 20) At the park, there are 30 puppies that have either white fur, black fur, or both. Twenty puppies have white fur and 15 puppies have black fur. How many puppies have both black and white fur?
A) 5 B) 15 C) 20 D) 25 _____
- 21) When I was 6 years old, my sister was half my age. How old is my sister now if I am 50 years old today?
A) 3 B) 25 C) 44 D) 47 _____
- 22) Phyllis has a bag of 19 marbles: 7 green, 3 blue, 4 yellow, and the rest are red. Without looking into the bag, what is the least number of marbles that Phyllis should take out to be sure that she has at least one yellow marble?
A) 4 B) 15 C) 16 D) 19 _____
- 23) Enoch is playing basketball. Some of his shots are worth 3 points and the rest are worth 2 points. If he made 38 shots into the basket and scored 85 points in total, how many shots were worth 3 points?
A) 9 B) 12 C) 24 D) 38 _____

Space for rough work

24) At the Sports Store, two bats and three gloves cost \$21. Three bats and two gloves cost \$19. How much does one bat and one glove cost altogether? _____
 A) \$8 B) \$12 C) \$15 D) \$40

25) If the first day of the year is on a Monday, what day of the week is the 32nd day? _____
 A) Sunday B) Wednesday C) Thursday D) Saturday

26) Which is the correct view for someone who is looking at the figure from above? _____

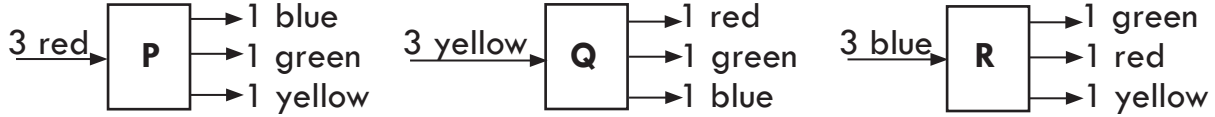


27) What is one half of half a pie? Which question below requires the correct logical thinking to solve this problem? _____
 A) How do you write one half?
 B) What is being cut in half?
 C) How could I draw this to show one half of one half?
 D) How big is the pie to start?

Space for rough work

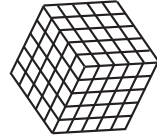


28) In each of the machines below if you put 3 candies into a machine, 3 different candies will come out. For example, if 3 red candies are put into machine P, it will give back 1 blue, 1 green, and 1 yellow candy. Nadya loves green candies. Her friend accidentally bought her 3 yellow candies, 2 blue candies, and 1 red candy. In what order should Nadya use the machines below to get at least 3 green candies?



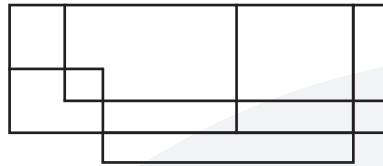
- A) Q, P, R B) Q, P, P C) Q, R, Q D) Q, R, P _____

29) A 5 by 5 by 5 cube is made up of little 1 by 1 by 1 cubes. If you paint the outside of the big cube, how many of the little cubes are painted?



- A) 75 B) 98 C) 125 D) 150 _____


30) How many rectangles of all sizes are in this diagram?



- A) 21 B) 22 C) 23 D) 24 _____

Space for rough work





To promote co-operation, inspire
confidence and
Release the Genius®
in every child.

For more information, please visit:
spiritofmathcontest.com

   /spiritofmath