

GRADE 4

Spirit of Math International Contest 2021

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

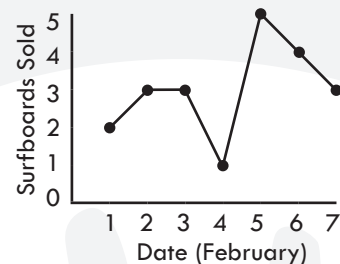
1) $56 + 72 + 44 + 28 = ?$
 A) 180 B) 190 C) 200 D) 210 _____

2) There are 16 trees in the park. If Roland climbed half of the trees, how many trees did he climb?
 A) 8 B) 9 C) 10 D) 12 _____

3) A palindrome is a word, phrase or number that reads the same backwards and forwards. For example, 2112 is a palindrome. Which of these numbers is a palindrome?
 A) 12345 B) 22333 C) 114114 D) 93139 _____

4) It takes Jessica 20 minutes to walk from her house to school. If she leaves her house at 8:15 a.m. to walk to school, what time will she arrive at school?
 A) 7:55 a.m. B) 8:30 a.m. C) 8:35 a.m. D) 8:40 a.m. _____

5) The graph on the right shows the number of surfboards sold in Hawaii during the first week of February. Which day had the fewest sales?




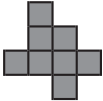


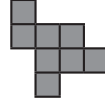
A) February 1st B) February 4th C) February 5th D) February 7th _____

6) What is the number of sides of a hexagon divided by the number of sides of a triangle?
 A) 2 B) 3 C) 4 D) 6 _____

7) Andy, Brandy, and Sandy all live on Long Lane. Andy lives 32 km directly north of Brandy. Sandy lives 14 km directly south of Brandy. How far apart do Andy and Sandy live?
 A) 14 km B) 18 km C) 32 km D) 46 km _____

Space for rough work



- 8) Marika jogged around the perimeter of a rectangular-shaped playground one time. If the playground is 25 metres long and 20 metres wide, what distance did Marika jog?
 A) 45 m B) 70 m C) 90 m D) 500 m _____
- 9) Tyler makes five balloon animals every day. How many balloon animals can he make in two weeks?
 A) 35 B) 70 C) 75 D) 85 _____
- 10) Alphonse is seven years older than Lisette. Jerome is half the age of Lisette. If Alphonse is 15, how old is Jerome?
 A) 4 B) 5 C) 8 D) 16 _____
- 11) What is the next term in the sequence: 2, 3, 5, 8, 12, ____
 A) 14 B) 16 C) 17 D) 19 _____
- 12) Which of the following options is a reflection of this shape?

 A)  B)  C)  D)  _____
- 13) Cowgirl Carly cuts a carrot for her cattle into 22 pieces using only parallel cuts. How many cuts does she make?
 A) 21 B) 22 C) 23 D) 24 _____
- 14) Vivienne has a collection of 28 buttons. All but 20 buttons are a shade of blue. How many buttons are a shade of blue?
 A) 8 B) 18 C) 20 D) 28 _____

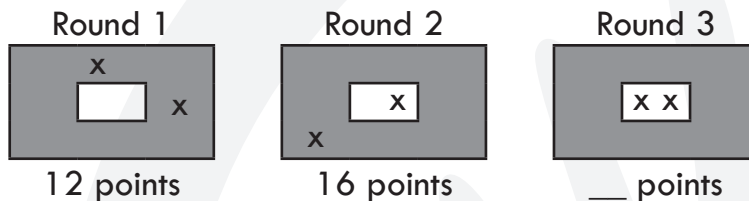
Space for rough work

15) I am thinking of two numbers. When I multiply the numbers I get 15. When I add the numbers, I get a one digit number. What do I get when I add the numbers?
 A) 6 B) 8 C) 9 D) 16 _____

16) Andrew, Barnabus, Chris, and Dalia are standing in line to see the new Captain Canada movie. Dalia is directly behind Andrew. Chris is not last. Andrew is not first, but he is two places ahead of Barnabus. Who is third in line?
 A) Andrew B) Barnabus C) Chris D) Dalia _____

17) Hans started reading his book of fairy tales at the top of page 45 and finished at the bottom of page 72. How many pages did Hans read? Which question below requires the correct logical thinking to solve this problem?
 A) How many pages are in the book? C) How many books does Hans read every day?
 B) How many pages are before page 72? D) How many pages did Hans not read? _____

18) On Darwin's Dart Board, all darts that land in the shaded area are worth the same number of points and all darts that land in the unshaded area are worth the same number of points. The diagram below shows where Darwin's two darts landed in each round and the number of points Darwin scored. How many points did Darwin score in Round 3?

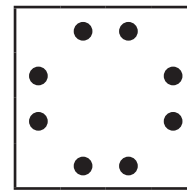


A) 18 B) 20 C) 22 D) 24 _____

Space for rough work



- 19) Agnes has a piece of paper with eight dots on it, as shown to the right. She wants to fold her paper such that she can make a single hole-punch that will pass through all the dots and no where else. What is the fewest number of folds Agnes needs to make?

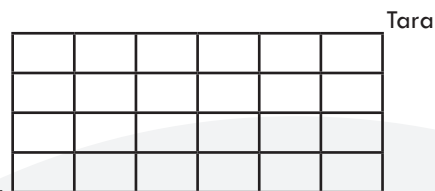


- A) 2 B) 3 C) 4 D) 6 _____

- 20) Jacques is exploring the Great Barrier Reef in his small submarine. From the ocean's surface, he goes down 15 feet, then goes up 12 feet. Jacques travels 20 feet to his right to avoid a shark, then goes down 20 feet before going up 6 feet. How far is Jacques from the surface?

- A) 15 feet B) 17 feet C) 18 feet D) 37 feet _____

- 21) Sonja is going to a sleepover at Tara's house. Travelling only north and east on a 4x6 grid, how many different paths can she take?



- A) 24 B) 126 C) 210 D) 220 _____

- 22) Eleven astronauts live on the International Space Station. Every day two astronauts go on a spacewalk together. If every astronaut goes on a spacewalk with all the others once, how many spacewalks will they complete altogether?

- A) 45 B) 55 C) 90 D) 110 _____

- 23) How many ways can you rearrange the letters in the word MAMMAL, including the way that spells "MAMMAL"?

- A) 60 B) 120 C) 240 D) 720 _____

Space for rough work



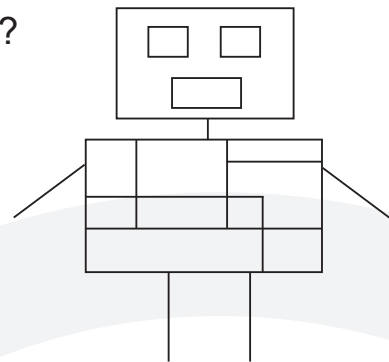
- 24) Ollie the Orca leaps out of the water every 20 minutes. Sal the Shark swims to the surface every 12 minutes. If they last met on the surface of the water at 8:00 a.m., how long will it take until they meet next on the surface of the water?
A) 40 minutes B) 60 minutes C) 75 minutes D) 120 minutes _____
- 25) Giulio can't wait to throw his sister a surprise party on her birthday. Giulio's sister's birthday is four days before a week after three days after nine days before April 2nd. When is the surprise party?
A) March 30th B) March 31st C) April 1st D) April 5th _____
- 26) Joshua went to the beach and saw some 8-legged crabs and some 2-legged herons. He counted 13 heads and 80 legs. How many crabs did he see?
A) 4 B) 7 C) 9 D) 27 _____
- 27) Farouq and Daniel are sketching portraits. Farouq can sketch 18 portraits in 45 minutes. Daniel takes twice as long to sketch the same number of portraits. How long will it take both of them together to sketch 54 portraits?
A) 50 minutes B) 60 minutes C) 80 minutes D) 90 minutes _____

Space for rough work

28) Khaled receives a box full of new shoes to sell. There are four blue pairs and nine orange pairs. What is the least number of shoes Khaled must remove without looking to be certain he has a left and a right orange shoe?
 A) 10 B) 17 C) 18 D) 26 _____

29) Todd and Thanesh are trick-or-treating on Pumpkin Drive, where they visit houses numbered with consecutive odd numbers from 21 to 57. If each boy receives three pieces of candy at each house, how many candies will they have in total?
 A) 57 B) 72 C) 108 D) 114 _____


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



A) 25 B) 26 C) 27 D) 28 _____

Space for rough work





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

For more information, please visit:
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