



Spirit of Math.®

## Grade Four Mathematics Contest 2019

### Instructions

1. You have **45 minutes** to write the contest.
2. The contest is multiple-choice with four choices for each question. Write the CAPITAL letter of the answer you choose on the line to the right of each question.
3. Each question answered correctly is worth one mark, and the sum of the correct answers is the score.
4. Marks are not taken off for wrong answers.
5. No calculators or other counting tools are allowed.

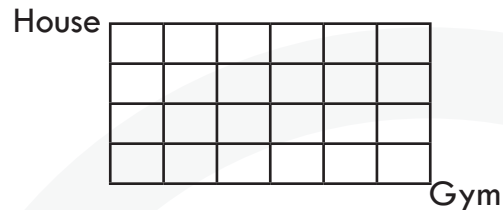
Student Name: \_\_\_\_\_

Score:    /30

- 1)  $-19 + 83 + 17 - 1 = ?$   
 A) -20                      B) 15                      C) 80                      D) 180                      \_\_\_\_\_
- 2) What is the next term in the sequence? 1, 2, 4, 7, 11, \_\_\_  
 A) 10                      B) 12                      C) 16                      D) 20                      \_\_\_\_\_
- 3)  $(1 \times 100) + (3 \times 100) - (1 \times 100) = ?$   
 A) 200                      B) 300                      C) 500                      D) 701                      \_\_\_\_\_
- 4) Farah needs to cut a carrot into 8 pieces to give to her rabbit. How many parallel cuts does she need to make?  
 A) 6                      B) 7                      C) 8                      D) 10                      \_\_\_\_\_
- 5) Which of the following is the smallest integer? 0, 2, 4, -9  
 A) 0                      B) 2                      C) 4                      D) -9                      \_\_\_\_\_
- 6)  $(2019 - 2018) \div (2018 - 2017) = ?$   
 A) 0                      B) 1                      C) 2017                      D) 2018                      \_\_\_\_\_
- 7) Charmain invited 32 guests to her pizza party. All but 21 did not show up, so there were \_\_\_ guests at her party.  
 A) 11                      B) 21                      C) 30                      D) 32                      \_\_\_\_\_
- 8) Tim is 5 years younger than me. I am 3 years older than my brother, Jim. If Jim is 8 years old, how old is Tim?  
 A) 6                      B) 8                      C) 10                      D) 12                      \_\_\_\_\_
- 9) The number of vertices of a cube multiplied by the number of sides of a triangle is equal to:  
 A) 24                      B) 28                      C) 32                      D) 27                      \_\_\_\_\_
- 10) How many prime numbers are there between 10 and 20?  
 A) 4                      B) 5                      C) 6                      D) 7                      \_\_\_\_\_
- 11) Vikram is going to the dance festival 3 days before 8 days after 2 days after 5 days before July 29<sup>th</sup>. When is the dance festival?  
 A) August 1<sup>st</sup>                      B) July 29<sup>th</sup>                      C) July 30<sup>th</sup>                      D) July 31<sup>st</sup>                      \_\_\_\_\_
- 12) Dave's scores on his first five tests were: 15, 20, 14, 17 and 19. What is his average?  
 A) 15                      B) 16                      C) 17                      D) 18                      \_\_\_\_\_



- 13) Lillian likes candy. She had 24 candies with coconut flavouring and 32 candies with strawberry flavouring. Twelve of the candies had both coconut and strawberry flavours. How many candies did she have in total?  
A) 32                      B) 44                      C) 54                      D) 56                      \_\_\_\_\_
- 14) A box 3 cm by 3 cm by 3 cm is filled with smaller cubes of 1 cm by 1 cm by 1 cm. If all these smaller cubes are lined up, then how long is the line?  
A) 3 cm                      B) 9 cm                      C) 27 cm                      D) 81 cm                      \_\_\_\_\_
- 15) At the championship chess tournament, each of the 11 competitors played each other once. How many chess matches were there in total?  
A) 45                      B) 50                      C) 55                      D) 110                      \_\_\_\_\_
- 16) Four people can build four houses in four days. How many days does it take one person to build one house?  
A) 1 day                      B) 4 days                      C) 16 days                      D) 64 days                      \_\_\_\_\_
- 17) In Kareem's drawer, there are three different colours of socks: 6 blue socks, 14 black socks, and 9 red socks. Without looking into his drawer, how many socks does Kareem need to take out to be sure 2 black socks have been taken out?  
A) 15                      B) 17                      C) 18                      D) 29                      \_\_\_\_\_
- 18) Ruby wants to go to the gym. How many different ways can she get from her house to the gym if she can only travel south and east on a  $4 \times 6$  grid?  
A) 35                      B) 126                      C) 210                      D) 360                      \_\_\_\_\_
- 19) How many ways are there to rearrange the letters in the word SUMMER, including the way that spells "summer"?  
A) 120                      B) 242                      C) 300                      D) 360                      \_\_\_\_\_
- 20) Gerry wants to knit socks for her stuffed animals. She counted a total of 116 legs and 37 heads on her stuffed dogs and ducks. How many of her stuffed animals are ducks?  
A) 16                      B) 19                      C) 21                      D) 37                      \_\_\_\_\_
- 21) It takes Cake Cruncher 45 minutes to eat 24 chocolate cakes. It takes his friend Cake Chomper twice as long to eat the same amount of cake. How long will it take them to eat 48 chocolate cakes together?  
A) 45 minutes                      B) 55 minutes                      C) 60 minutes                      D) 90 minutes                      \_\_\_\_\_



- 22) What is one-half of one-quarter of 800?  
 A) 50                      B) 100                      C) 150                      D) 200                      \_\_\_\_\_
- 23) The sum of a number and its square is 132. What is the number?  
 A) 10                      B) 11                      C) 12                      D) 13                      \_\_\_\_\_
- 24) Robert is in line to watch the Avengers movie. He is the first person in front of the third person behind Sam. If there are 9 people in line and Sam is in the middle, where is Robert in the lineup?  
 A) Fifth                      B) Sixth                      C) Seventh                      D) Eighth                      \_\_\_\_\_
- 25) Martin is playing Mathopoly. He will collect money from the treasure chest if he can roll a sum of 5 with one throw of two fair hexahedral dice. What is the probability that he will roll a sum of 5?  
 A)  $\frac{2}{9}$                       B)  $\frac{1}{9}$                       C)  $\frac{5}{36}$                       D)  $\frac{7}{36}$                       \_\_\_\_\_
- 26) Eleven holiday light bulbs are on a 30 cm string. The first and last light bulbs are at the very end of the string and all the light bulbs are equal distance apart. How many holiday light bulbs are needed if the lights are spaced the same distance on a 60 cm long string?  
 A) 19                      B) 20                      C) 21                      D) 22                      \_\_\_\_\_
- 27) Matty and Katty like to be on their phones. Matty sends out a text message every 42 minutes. Katty sends out a text message every 24 minutes. At 9:00 a.m., they sent out a message at the same time. When is the next time they will send out a message at the same time?  
 A) 10:58 a.m.                      B) 11:18 a.m.                      C) 11:30 a.m.                      D) 11:48 a.m.                      \_\_\_\_\_
- 28) Albert decided to read all the odd pages in his book called "How to be a Math Genius". If he started reading on the top of page 43 and stopped at the bottom of page 105, how many pages did he read?  
 A) 32                      B) 33                      C) 62                      D) 65                      \_\_\_\_\_
- 29) Valentine is making a card for her friend. When the card is folded in half, it is rectangular and has a perimeter of 24 cm. When the card is open, the card is square shaped. What does each side of the card measure when the card is open?  
 A) 6 cm                      B) 8 cm                      C) 9 cm                      D) 10 cm                      \_\_\_\_\_
- 30) How many rectangles of all sizes are in this diagram?  
 A) 12                      B) 14                      C) 16                      D) 18                      \_\_\_\_\_

