



Spirit of Math.

Releasing the Genius®

GRADE 4

Spirit of Math International Contest 2024

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.

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

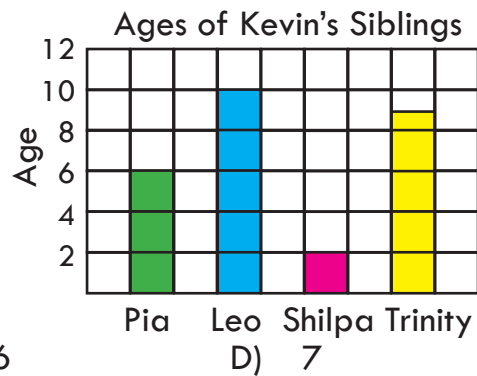


- 1) $67 - 14 + 3 - 26 = ?$
A) 20 B) 30 C) 40 D) 50 _____
- 2) Muhammad raised \$135 for the three food banks in his city. How much money will each food bank receive assuming the money is split evenly?
A) \$15 B) \$25 C) \$35 D) \$45 _____
- 3) Minnie wants to share her hot dog with her friends. If Minnie makes seven parallel cuts, how many pieces does she have?
A) 6 B) 7 C) 8 D) 9 _____
- 4) A palindrome is a number or word that can be read the same forwards and backwards (e.g., 2112 and MOM). Which of the following is **not** a palindrome?
A) 135531 B) 789789 C) RACECAR D) REPAPER _____
- 5) When counting the number of students in his school, Amar rounded to the nearest ten, resulting in 1470. Which of the following could be the number of students?
A) 1461 B) 1467 C) 1475 D) 1480 _____
- 6) Christopher is graduating from high school on June 27th! If his graduation date is two weeks from today, what is today's date?
A) June 13th B) June 17th C) July 18th D) July 21st _____
- 7) Tessa is deciding whether she wants to take a dance class or a music class. She chooses to take the one that is not the music class. Which is the other one?
A) The art class B) The dance class C) The music class D) Not enough information _____

Space for rough work



- 8) Kevin has four siblings whose ages are recorded in the graph to the right. If Kevin is eight years old, what is the average age of all five children?



- A) 4 B) 5 C) 6 D) 7 _____

- 9) Nadia has a collection of 21 dolls. All but eight of her dolls have brown hair. How many dolls have brown hair?

- A) 8 B) 13 C) 18 D) 21 _____

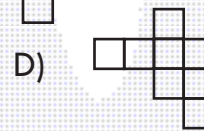
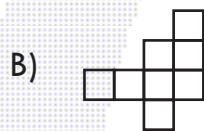
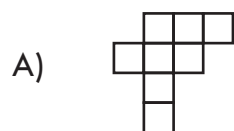
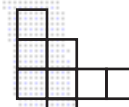
- 10) In the Math Garden, every flower is seven centimetres taller than the previous flower. The first flower is four centimetres tall. How tall is the fifth flower?

- A) 32 cm B) 33 cm C) 34 cm D) 35 cm _____

- 11) Alex and Zane live on the same street. Alex lives 16 km directly north of the library and Zane lives 41 km directly south of the library. How far apart do Alex and Zane live?

- A) 16 km B) 25 km C) 41 km D) 57 km _____

- 12) Which of the following options is a reflection of this shape?



Space for rough work



- 13) Mina has a vegetable garden with pepper plants and tomato plants. Each pepper plant has two peppers and each tomato plant has four tomatoes. If Mina has ten plants and 32 vegetables, how many pepper plants does she have?
 A) 4 B) 5 C) 6 D) 7 _____
- 14) Sally has one fair six-sided dice. What is the probability that she will roll one prime number?
 A) $\frac{1}{2}$ B) $\frac{1}{4}$ C) $\frac{4}{9}$ D) $\frac{5}{9}$ _____
- 15) If you want to insert the digit 6 somewhere in the number 983 to make the largest possible four-digit number, where should you insert the digit 6?
 A) At the beginning of 983 B) Between the 9 and 8 C) Between the 8 and 3 D) At the end of 983 _____
- 16) Yuna likes the numbers 3, 15, 21, 24, and 33, but she does not like the numbers 5, 8, 11, 14, or 28. Which of the following numbers will Yuna like?
 A) 10 B) 16 C) 22 D) 30 _____
- 17) There are 15 students in a chemistry class. Every day, two students are chosen to help demonstrate a chemistry experiment. If every student demonstrates an experiment with every other student once, how many experiments will be demonstrated altogether?
 A) 105 B) 113 C) 210 D) 225 _____

Space for rough work



18) At Fei's school, there are 78 lockers. All the lockers with odd numbers that are divisible by three have been reserved for the students in her homeroom class. How many students are in Fei's homeroom class? What is the best logical question you could ask to help you solve this problem?

- | | | | | |
|--|---|---|--|-------|
| A) Are there any students who never use their lockers? | B) How many lockers are there in Fei's high school? | C) How many odd numbers are there between 1 and 78? | D) How many odd numbers between 1 and 78 are divisible by 3? | _____ |
|--|---|---|--|-------|

19) Vladimir scored 11 points in each of his first three tennis games. How many points does he need to score in his fourth game to achieve an average of 13?

- | | | | | |
|------|-------|-------|-------|-------|
| A) 3 | B) 12 | C) 19 | D) 52 | _____ |
|------|-------|-------|-------|-------|

20) In a secret code, 16.9.1.14.15 represents the word PIANO. Using the same secret code, what series of numbers represents the word VIOLIN?

- | | | |
|--------------------|--------------------|-------|
| A) 22.9.15.12.9.14 | B) 22.9.16.12.9.14 | _____ |
| C) 23.9.15.12.9.14 | D) 23.9.16.12.9.14 | _____ |

21) Frederica is baking cupcakes. If she can bake a dozen cupcakes every 25 minutes, how many cupcakes can she bake in 3.75 hours?

- | | | | | |
|-------|-------|--------|--------|-------|
| A) 84 | B) 96 | C) 108 | D) 120 | _____ |
|-------|-------|--------|--------|-------|

22) Amita is deciding between two cell phone plans. Connect+ costs \$10 a month for the first five months and \$9 every two months after that. Meanwhile, Phones+ costs \$80 for an entire year of service. If Amita keeps her cell phone plan for 11 months, which option is the least expensive overall?

- | | | | | |
|-------------|------------|-----------------------|---------------------------|-------|
| A) Connect+ | B) Phones+ | C) Both cost the same | D) Not enough information | _____ |
|-------------|------------|-----------------------|---------------------------|-------|

Space for rough work

- 23) The diagram to the right is made up of five identical rectangles. If the area of the shaded region is $7 u^2$, what is the area of the entire rectangle?



- A) $10 u^2$ B) $14 u^2$ C) $16 u^2$ D) $17.5 u^2$ _____
- 24) Thirty students went to a museum for a field trip. Fourteen students visited the dinosaur exhibit and nine students visited the space exhibit. Two students visited both the dinosaur and space exhibits. How many students visited neither the dinosaur exhibit, nor the space exhibit?
- A) 5 B) 7 C) 9 D) 11 _____
- 25) $16 + 32 \div (7 - \sqrt{9})^2 =$
- A) 3 B) 8 C) 13 D) 18 _____
- 26) Chen has four books on his bookshelf. The red book has 100 pages, the yellow book has 79 pages, the green book has 120 pages, and the blue book has 68 pages. The number of pages in the first book is not divisible by 5. The second book is not green or blue. The number of pages in the third book is a perfect square. What colour is the fourth book?
- A) Blue B) Green C) Red D) Yellow _____
- 27) Oliver goes to the local farmer's market every 12 days and Olivia goes to the local farmer's market every 15 days. If both Oliver and Olivia go to the local farmer's market on the seventh day of the new year, when is the next day that they will both go to the local farmer's market on the same day?
- A) 60 B) 67 C) 180 D) 187 _____

Space for rough work

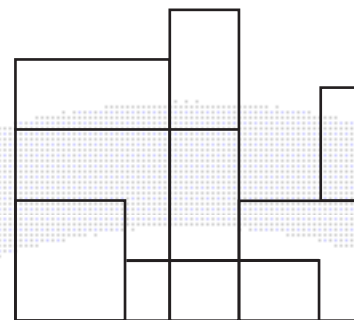
28) Dean is planning a vacation across Europe. He wants to visit England, France, Italy, and Spain once, but he does not want to visit England first. How many different ways can Dean travel across Europe?

- A) 9 B) 12 C) 16 D) 18 _____

29) Tom's age is between 15 and 25 and he is four times as old as Jerry. Three years from now, both Tom and Jerry's ages will be prime numbers. How old is Jerry now?

- A) 4 B) 7 C) 16 D) 19 _____


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



- A) 8 B) 9 C) 18 D) 19 _____

Space for rough work





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confidence and
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in every child.

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