

22. Maria had 28 dreams last month. If 16 of them involved monkeys, 15 involved squirrels, and 4 involved no animals, then at least how many dreams involved both monkeys and squirrels?

- A) 3 B) 7 C) 9 D) 11



22.

23. The lengths of three consecutive sides of a $_?$ could be 3, 3, and 8.

- A) triangle B) square
C) parallelogram D) trapezoid

23.

24. I have 500 pennies. If I spend 6 pennies a day until I can no longer do so, at the end of one of the days I will have exactly $_?$ pennies left.

- A) 6 B) 8 C) 10 D) 12

24.

25. A “combo” ticket to enter the fair and ride unlimited rides is \$30. A “per ride” ticket costs \$12.50 to enter and \$5 per ride. For a “combo” ticket to cost less than a “per ride” ticket, a person must go on at least $_?$ rides.

- A) 3 B) 4 C) 6 D) 7

25.

26. The ones digit of $9 \times 8 \times 7 \times 6 \times 5 \times 4 \times 3 \times 3 \times 4 \times 5 \times 6 \times 7 \times 8 \times 9$ is

- A) 0 B) 4 C) 6 D) 9

26.

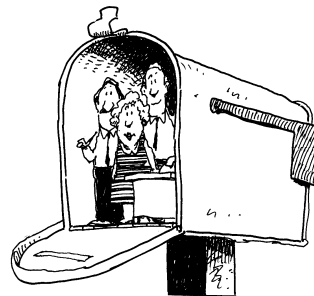
27. A football team scores an average of 31 points per game in its first four games and an average of 30 points per game in its first five games. How many points did the team score in its fifth game?

- A) 26 B) 27 C) 28 D) 29

27.

28. The 7 people in my mailbox leave. I write X for each man and O for each woman as they leave. I have 3 X’s and 4 O’s, with no 2 X’s in a row. There are $_?$ different orders in which the X’s and O’s could be written.

- A) 4 B) 6 C) 8 D) 10



28.

29. Mo and Jo have a total of 120 coins; Bo and Ko have 153; and Mo and Bo have 127. In all, Jo and Ko have $_?$ coins.

- A) 106 B) 128 C) 135 D) 146

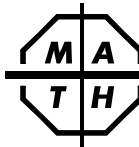
29.

30. The largest perimeter a rectangle made of 100 2×2 squares can have is

- A) 88 B) 100 C) 400 D) 404

30.

The end of the contest 5



Sample 5th Grade Contest

5

Spring, 2013

Instructions

- **Time** Do *not* open this booklet until you are told by your teacher to begin. You will have only *30 minutes* working time for this contest. You might be *unable* to finish all 30 questions in the time allowed.
- **Scores** Please remember that *this is a contest, and not a test*—there is no “passing” or “failing” score. Few students score as high as 24 points (80% correct). Students with half that, 12 points, *should be commended!*
- **Format and Point Value** This is a multiple-choice contest. Each answer will be one of the *capital letters* A, B, C, or D. Write each answer in the *Answer Column* to the right of each question. We suggest (but do not require) that you use a pencil. Each question you answer correctly is worth 1 point. Unanswered questions receive no credit. You **may** use a calculator *unless* your school does *not* allow you to use one.

Please Print

Last Name _____ First Name _____



School _____ Teacher _____ Grade Level _____



Do Not Write In The Space Below

To the Teacher:

Please enter the student’s score at the right before you return this paper to the student. **Student’s Score:** _____

Eighteen books of past contests, *Grades 4, 5, & 6 (Vols. 1, 2, 3, 4, 5, 6)*, *Grades 7 & 8 (Vols. 1, 2, 3, 4, 5, 6)*, and *High School (Vols. 1, 2, 3, 4, 5, 6)*, are available, for \$12.95 per volume, from Math League Press, P.O. Box 17, Tenafly, NJ 07670-0017.

| | | | |
|--|---|---|-----|
| 1. Sue hasn't struck out since 18 days before Saturday. That day was a A) Tuesday B) Wednesday C) Thursday D) Friday |  | 1. | |
| 2. $(1 + 2 + 3) \times 10 = 30 + 20 + ?$ A) 10 B) 11 C) 33 D) 44 | | 2. | |
| 3. I listened to 6 songs before the one I'm listening to now, and I will listen to 6 more after this one. All together, that's $?_?$ songs. A) 11 B) 12 C) 13 D) 14 | | 3. | |
| 4. $100 \text{ hundreds} \div 10 \text{ tens} =$ A) 10 B) 100 C) 1000 D) 10000 | | 4. | |
| 5. $9 + 99 + 999 = 9 \times ?_?$ A) 111 B) 112 C) 122 D) 123 | | 5. | |
| 6. I created 30 characters, 3 for each video game I own. That means I own $?_?$ video games. A) 10 B) 33 C) 40 D) 90 | | 6. | |
| 7. If I add the number of sides that a hexagon has to the number of sides that a $?_?$ has, then the sum is odd. A) rhombus B) square C) pentagon D) quadrilateral | | 7. | |
| 8. $40 + 30 \times 20 + 10 \times 0 =$ A) 0 B) 150 C) 640 D) 1400 | | 8. | |
| 9. My older brother is 6 years older than I am, and the sum of our ages is 30. How old is my older brother? A) 12 B) 15 C) 18 D) 21 | | 9. | |
| 10. Don paid for 5 tropical punches with a \$50 bill and got \$16 in change. He paid $?_?$ per tropical punch. A) \$5.20 B) \$6.80 C) \$8.20 D) \$8.80 | |  | 10. |
| 11. The average of one dozen and two dozen is A) 13 B) 18 C) 24 D) 36 | | | 11. |

| | | | |
|---|---|---|-----|
| 12. At normal speed, it takes Manuel exactly one hour and 46 minutes to play a trombone concerto. Playing at twice that speed, it would take Manuel $?_?$ minutes to play the concerto. A) 53 B) 73 C) 83 D) 212 |  | 12. | |
| 13. If I triple $?_?$ and then subtract 60, I get 180. A) 40 B) 60 C) 70 D) 80 | | 13. | |
| 14. There are a total of 2013 students enrolled at 8 high schools. If there are 234 students at each of 4 of the schools, then there are a total of $?_?$ students at the other 4 schools. A) 1077 B) 1123 C) 1234 D) 1443 | | 14. | |
| 15. Three different books are arranged in a line on my bookshelf. In how many different orders can these books be arranged? A) 3 B) 4 C) 5 D) 6 | | 15. | |
| 16. A square piece of paper has a perimeter of 36 cm. What is the area of a square piece of paper with twice that perimeter? A) 72 cm^2 B) 108 cm^2 C) 144 cm^2 D) 324 cm^2 | | 16. | |
| 17. I have equal numbers of quarters, dimes, and nickels. These coins could have a total value of any of the following EXCEPT A) \$2.40 B) \$3.80 C) \$4.40 D) \$5.20 | | 17. | |
| 18. Of the following, $?_?$ has the greatest number of whole number factors. A) 6 B) 9 C) 12 D) 16 | | 18. | |
| 19. The least common multiple of 10 and 24 plus the greatest common factor of 10 and 24 equals A) 121 B) 122 C) 241 D) 242 | | 19. | |
| 20. There are 5 cars for every 3 trucks parked in a lot. If there is a total of 120 cars and trucks parked in the lot, there are $?_?$ cars there. A) 24 B) 45 C) 75 D) 80 | |  | 20. |
| 21. Sven is skiing at a rate of 600 m/min. That equals a rate of $?_?$ cm/sec. A) 100 B) 600 C) 1000 D) 60000 | | | 21. |