

2008-2009 6TH GRADE CONTEST

Answers

30. Of the multiples of 7 that exceed 7, how many are factors of 700?
 A) 99 B) 8 C) 7 D) 5
31. If points *A* through *I* are spaced evenly on the number line, then the distance from *B* to *H* is twice the distance from
 A) *A* to *F* B) *E* to *G*
 C) *C* to *E* D) *D* to *G*
32. I ride my bicycle exactly 50 km every other day. In 15 weeks, I ride *at most*
 A) 2250 km B) 2600 km
 C) 2650 km D) 3000 km
33. $\sqrt{2} \times 4 \times 8 \times \sqrt{8} \times 8 =$
 A) 64 B) 32 C) 16 D) 8
34. If my school has four times as many girls as boys, then the number of girls minus the number of boys *could* be
 A) 2013 B) 2011 C) 2009 D) 2008
35. Of the first 100 whole numbers, ? use the digit 2 at least once.
 A) 20 B) 19 C) 11 D) 10
36. If I write all 26 letters of the English alphabet in alphabetical order 62 times in a row, then the 806th letter I write will be
 A) *A* B) *E* C) *V* D) *Z*
37. If the ratio of my age now to my age 6 years ago is 3:2, then my age 4 years from now will be
 A) 18 B) 20 C) 22 D) 24
38. After each of 50 cards is marked with a different whole number from 1 through 50, the cards are then paired at random. *At most* how many of these 25 pairs have a sum of 25?
 A) 1 B) 6 C) 12 D) 24
39. The sum of the whole numbers from 1 through 100 is 5050. What is the sum of the whole numbers from 1 through 200?
 A) 5150 B) 10 100 C) 11 050 D) 20 100
40. In how many different ways can six identical coins be distributed among Al, Bo, and Carl so that each gets at least 1 coin?
 A) 10 B) 9 C) 8 D) 7



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SIXTH GRADE MATHEMATICS CONTEST

Math League Press, P.O. Box 17, Tenafly, New Jersey 07670-0017

2008-2009 Annual 6th Grade Contest

Tuesday, February 17 or 24, 2009

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Instructions

- **Time** You will have only 30 minutes working time for this contest. You might be *unable* to finish all 40 questions in the time allowed.
- **Scores** Please remember that *this is a contest, not a test*—and there is no “passing” or “failing” score. Few students score as high as 30 points (75% correct). Students with half that, 15 points, *should be commended!*
- **Format and Point Value** This is a multiple-choice contest. Each answer is an A, B, C, or D. Write each answer in the *Answers* column to the right of each question. A correct answer is worth 1 point. Unanswered questions get no credit. You **may** use a calculator.



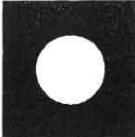
The end of the contest 6

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1. $25 + 35 + 45 = 60 + ?$
A) 25 B) 35 C) 45 D) 55
2. The number of weeks in 139 days is most nearly equal to
A) 3 km B) 6 km C) 9 km D) 12 km
3. The number of days in July plus the number of days in August is twice the number of days in
A) March B) April C) June D) November
4. $(3 \times 1) + (3 \times 2) + (3 \times 3) + (3 \times 4) = 3 \times ?$
A) 5 B) 12 C) 12 D) 12
5. $8002 - 2008 = ? - 2009$
A) 9003 B) 9002 C) 8003 D) 8002
6. If both square S and equilateral triangle T have a perimeter of 60 cm, then each side of T is $\frac{?}{3}$ longer than each side of S.
A) 3 cm B) 5 cm C) 8 cm D) 15 cm
7. A regular polygon with perimeter 60 cannot have a side of length
A) 1, 1, 3 B) 2, 2, 3 C) 3, 3, 3 D) 4, 4, 3
8. The average value of \$2, \$4, \$6, \$8, and \$10 is $\frac{?}{2}$ pennies.
A) 3000 B) 600 C) 550 D) 500
9. The greatest odd factor of the product $1 \times 2 \times 3 \times 4 \times 5 \times 6$ is
A) 5 B) 15 C) 45 D) 75
10. 50% of 30% = 15% of
A) 10% B) 25% C) 100% D) 150%
11. Before I began snacking, there were $60 \div 4 + 1 \times 3$ gumballs here. If I ate all of them, how many gumballs did I eat?
A) 4 B) 18 C) 36 D) 48
12. If 20×30 is divided by 40, the remainder is
A) 30 B) 15 C) 10 D) 0
13. $180 \div 6 = 6 \times ?$
A) 180 B) 36 C) 30 D) 5
14. Ann sleeps just 8 hrs. each day, so in 10 days, she's awake $\frac{?}{2}$ hrs.
A) 10x16 B) 8x10 C) 8x24 D) 16x24
15. The total value of 25 dimes is 125 times the total value of
A) 1 penny B) 1 nickel C) 2 pennies D) 2 nickels
16. (the number of cm in 1 m) : (the number of m in 1 km) =
A) 100:1000 B) 1000:100 C) 1:100 D) 100:1

17. Al ran twice as far as Bob ran. They ran a total of 18 km. How far did Al run?
A) 5 B) 14 C) 19 D) 20
18. Since $7^2 = 49$, its ones' digit is
A) 0 B) 2 C) 4 D) 8
19. If a turkey facing north turns 225° clockwise, it will then face
A) southwest B) southeast
C) northwest D) northeast
20. If I $\frac{?}{3}$ the number of dozens by $\frac{?}{3}$,
then I'll get the number of pairs.
A) multiply, 6 B) divide, 6
C) multiply, 2 D) divide, 2
21. The lengths of the three sides of a triangle could not be
A) 1, 1, 3 B) 2, 2, 3 C) 3, 3, 3 D) 4, 4, 3
22. A whole number divisible by 6 and by 14 need not be divisible by
A) 21 B) 12 C) 7 D) 3
23. Round 398° C to the nearest 10°.
A) 380° C B) 390° C C) 399° C D) 400° C
24. A painting, Cat Smile, is priced at \$1200.
Its price is increased by 10%. Its new price is then decreased by 10%. What is the final price of Cat Smile?
A) \$1212 B) \$1200 C) \$1188 D) \$1100
25. $10^5 + 10^6 = 10^5 \times ?$
A) 11 B) 12 C) 10² D) 10⁶
26. If 6 hoots = 3 hollers, then 10 hollers = $\frac{?}{2}$ hoots.
A) 5 B) 13 C) 18 D) 20
27. The product of two whole numbers is 42. Their sum cannot be
A) 43 B) 33 C) 23 D) 13
28. As shown, a circle of diameter 2 is drawn inside a square of side 4. To the nearest tenth, what is the perimeter of the shaded region?

29. The average of the different prime factors of 2009 is
A) 2009 B) 147 C) 48 D) 24

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