# 5th Grade Contests

## 1996-1997 through 2000-2001

FIFTH GRADE MATHEMATICS CONTEST
Math League Press, P.O. Box 17, Tenafly, New Jersey 07670-0017

# 1996-97 Annual 5th Grade Contest

*Spring, 1997*

## Instructions

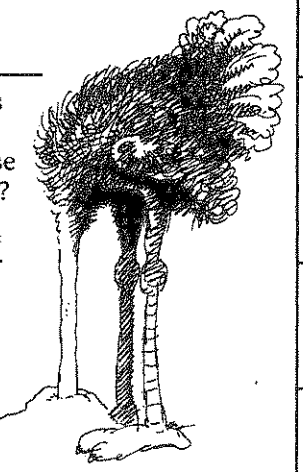
5

- **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, not a test*—and 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 is an A, B, C, or D. Write each answer in the *Answer Column* to the right of each question. A correct answer is worth 1 point. Unanswered questions get no credit. You **may** use a calculator.

Answer Column

1. $5 + 10 + 15 = 4 + 9 + 14 + \underline{?}$

A) 2 B) 3 C) 4 D) 5



2. I looked in a hole to find your lost marbles and I found 3 blue, 4 red, 2 white, and 5 green marbles. How many more of these marbles were *not* green than were green?

A) 4 B) 5 C) 9 D) 14

3. 5 nickels + 5 dimes has the same value as $\underline{?}$ quarters.

A) 2 B) 3 C) 4 D) 5

4. $111 - 11 - 1 = (777 - 77 - 7) \div \underline{?}$

A) 7 B) 8 C) 9 D) 10

5. The product of two even numbers and one odd number is

A) even B) odd C) more than 10 D) prime

6. 19 hundreds + 8 tens + 17 ones =

A) 1987 B) 1996 C) 1997 D) 2717

7. If my art class starts at 2:45 P.M. and ends at 4:15 P.M., then my art class is $\underline{?}$ minutes long.

A) 60 B) 75 C) 90 D) 120

8. 500 cm + 50 m + 5 km = $\underline{?}$ m

A) 55 B) 550 C) 555 D) 5055


9. If the number of marchers in the last parade was equal to the largest even number less than 2000, how many people marched in that parade?

A) 1000 B) 1998 C) 1999 D) 2000

10. How many hours are in one week?

A) 7 B) 24 C) 168 D) 10 080

11. A Pizza Heaven pizza costs $10.80 and is always cut into 8 equal slices. What is the cost per slice of Pizza Heaven pizza?

A) $1.10 B) $1.20 C) $1.25 D) $1.35

*Go on to the next page* ➡

Answer Column

12. $6\times(3\times5\times7) - (3\times5\times7) = \underline{?}\times(3\times5\times7)$ — 12.

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

13. What is the ones' digit of the product $2\times2\times2\times2\times5\times5\times5\times5$? — 13.

A) 0 B) 1 C) 2 D) 5

14. The value of 1 quarter + 9 dimes + 9 nickels + 7 pennies is — 14.

A) \$1.67 B) \$1.97 C) \$2.52 D) \$19.97

15. In total, how many 3-digit whole numbers use *all three* of the digits 1, 2, and 3? — 15.

A) 3 B) 4 C) 5 D) 6

16. I tried to hit a tennis ball moving at 240 km/hr. That equals a speed of $\underline{?}$ km/min. — 16.

A) 2 B) 4 C) 6 D) 8

17. Of the following, the largest product is — 17.

A) $2\times4\times9$ B) $2\times3\times12$

C) $3\times4\times6$ D) $3\times5\times5$

18. The perimeter of one square is twice that of another. If a side of the larger square is 6 cm long, then the area of the smaller is — 18.

A) 9 $cm^2$ B) 18 $cm^2$ C) 36 $cm^2$ D) 72 $cm^2$

19. When filled, a tray holds \$10 worth of quarters. How many quarters are needed to fill this tray? — 19.

A) 25 B) 40 C) 50 D) 250

20. My aunt wears a great many hats. If the number of hats my aunt wears is 1 less than the thousands' digit of 17 854, then my aunt wears $\underline{?}$ hats. — 20.

A) 9 B) 8 C) 7 D) 6

21. If Jo is the 2nd tallest of 126 fifth grade students, how many of these students are shorter than Jo? — 21.

A) 123 B) 124 C) 125 D) 126

22. How much must I pay for a 5-minute phone call that costs \$1 for the first minute and 75¢ for each additional minute? — 22.

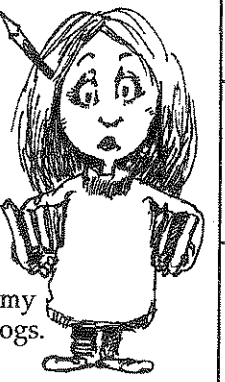
A) \$3.25 B) \$3.75 C) \$4 D) \$5

*Go on to the next page* ➡

Answer Column

23. In which of the following divisions is the remainder 1 more than the remainder you get when you divide 176 by 3?
A) 173 ÷ 5 B) 174 ÷ 4 C) 175 ÷ 3 D) 176 ÷ 2 — 23.

24. I'm thinking of 3 unequal whole numbers, each less than 10. Of the following, each could be their sum *except*
A) 4 B) 6 C) 24 D) 25 — 24.

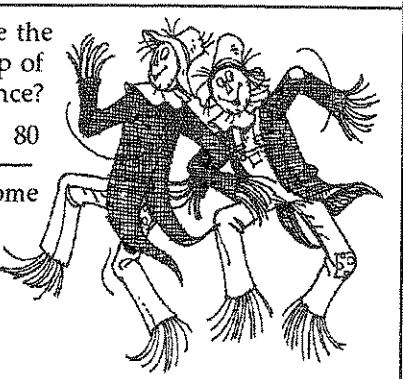


25. At a book sale, if I sold half the books, you sold half the remainder, and 40 books were not sold, then we started with ? books.
A) 10 B) 80 C) 120 D) 160 — 25.

26. Last week, I bought 1 pog (my first pog). The number I buy doubles each week. If I keep all my pogs, 3 weeks from now I'll have a total of ? pogs.
A) 31 B) 16 C) 15 D) 7 — 26.

27. If a rectangular window which is twice as high as it is wide has a width of 30 cm, then the sum of its width and height is
A) 45 cm B) 60 cm C) 90 cm D) 120 cm — 27.

28. If 2 of every 3 scarecrows dance the macarena, how many of a group of 120 scarecrows *don't* do this dance?
A) 30 B) 40 C) 60 D) 80 — 28.



29. In counting from 1 to 1000, at some point I call out 5 numbers in a row whose sum is 600. The smallest of these 5 numbers is
A) 596 B) 120
C) 118 D) 116 — 29.

30. Jack added all the odd numbers from 1 to 1999. Jill added all the even numbers from 2 to 2000. Jill's sum is ? more than Jack's.
A) 999 B) 1000 C) 1999 D) 2000 — 30.

*The end of the contest*



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FIFTH GRADE MATHEMATICS CONTEST
Math League Press, P.O. Box 17, Tenafly, New Jersey 07670-0017

# 1997-98 Annual 5th Grade Contest

*Spring, 1998*

## Instructions

5

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Answer Column

1. $5 + 10 + 15 + 20 + 25 = (1 + 2 + 3 + 4 + 5) \times$ ?

   A) 2 B) 3 C) 4 D) 5

   1.

2. A certain basket can hold a half-dozen eggs. How many of these baskets do I need to hold 3 dozen eggs?

   A) 3 B) 4 C) 5 D) 6

   2.

3. What is the measure of the largest angle in a right triangle?

   A) 45° B) 60° C) 90° D) 180°

   3.

4. Of the following, which has a value different from the others?

   A) $40 \times 50$ B) $4 \times 5000$ C) $50 \times 400$ D) $40 \times 500$

   4.

5. What is the remainder when 222 222 222 is divided by 4?

   A) 3 B) 2 C) 1 D) 0

   5.

6. If one bag of chips costs 75¢, then three of these bags cost

   A) \$0.25 B) \$1.50 C) \$2.25 D) \$3.00

   6.

7. Of the following, which has the largest odd factor?

   A) 30 B) 32 C) 36 D) 40

   7.

8. My baby brother will be 3 weeks old in 2 days. How many days old is he today?

   A) 18 B) 19 C) 20 D) 21

   8.

9. $10 + 11 + 12 + 13 + 14 =$
   $(30 + 31 + 32 + 33 + 34) -$ ?

   A) 5 B) 20 C) $3 \times 20$ D) $5 \times 20$

   9.

10. 1 thousand + 9 hundreds + 8 tens + 18 ones =

    A) 1918 B) 1988 C) 1998 D) 19 818

    10.

11. Which of the following quotients is 1 more than $162 \div 18$?

    A) $128 \div 16$ B) $120 \div 15$ C) $132 \div 12$ D) $110 \div 11$

    11.

12. (number of angles in a square) + (number of angles in a triangle) =

    A) 7 B) 9 C) 10 D) 12

    12.

Answer Column

13. The product of any 3-digit whole number and any 2-digit whole number can contain at most how many digits? — 13.

A) 3 B) 4 C) 5 D) 6

14. The largest whole-number multiple of 7 less than 200 is — 14.

A) 187 B) 189 C) 196 D) 197

15. Dancing pencils cost 74¢ each for the first dozen and 69¢ each for the rest. How much will it cost to buy a dancing pencil for each of your 27 friends? — 15.

A) \$18.63 B) \$19.23 C) \$19.38 D) \$19.98

16. (The number of seconds in a week) ÷ (the number of minutes in a week) = — 16.

A) 60 B) 420 C) 3600 D) 7200

17. If 60 cm of snow falls each hour, how much falls in 100 minutes? — 17.

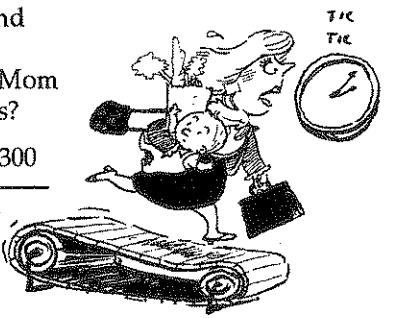
A) 90 cm B) 1 m C) 110 cm D) 120 cm

18. If the sum of 9 numbers is 1998, then their average is — 18.

A) 9 + 1998 B) 9×1998 C) 1998 ÷ 9 D) 9 ÷ 1998

19. How many times does the second hand go completely around the face of her circular clock while Mom jogs each morning for 5 minutes? — 19.

A) 5 B) 30 C) 60 D) 300



20. A polygon that contains exactly 5 angles has exactly ? sides. — 20.

A) 3 B) 5 C) 8 D) 10

21. What is the product of the least common multiple of 6 and 18 and the greatest common factor of 6 and 18? — 21.

A) 6 B) 18 C) 54 D) 108

22. A rectangle 2 cm wide and 4 cm long can be divided into how many squares with sides 1 cm long? — 22.

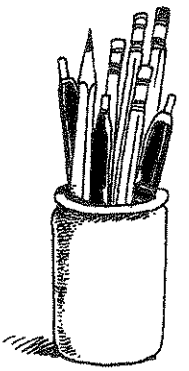
A) 2 B) 4 C) 6 D) 8

Go on to the next page ➡

Answer Column

23. If 3 pens cost as much as 7 pencils, then 42 pencils cost as much as ? pens.

A) 6 B) 18 C) 21 D) 98



23.

24. What is the greatest number of days that can occur *after* the first of one month and before the first of the next month?

A) 27 B) 28 C) 29 D) 30

24.

25. Two squares with perimeter 4 cm are joined to form a rectangle whose length is 2 cm. What is the width of the rectangle?

A) 1 cm B) 2 cm C) 3 cm D) 4 cm

25.

26. John is now twice as old as Karen and half as old as Bob. Bob's age is how many times Karen's age?

A) 2 B) 3 C) 4 D) 5


26.

27. Each of 300 students belongs to exactly 2 of the 5 school clubs. What is the average number of students in each club?

A) 50 B) 60 C) 120 D) 150

27.

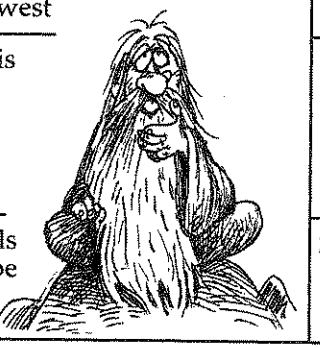
28. In my hometown, city streets are numbered with odd numbers in increasing order from south to north and with even numbers in increasing order from west to east. In what direction must I travel if I want to go *directly* from 241st Street to 225th Street?

A) north B) south C) east D) west

28.

29. In months, Rip Van Wrinkle's age on his birthday has three digits. In years, his age has one digit. How old is Rip?

A) 108 months B) 120 months
C) 132 months D) 144 months



29.

30. If the sum of two whole numbers equals twice their difference, this sum *cannot* be

A) 222 B) 444 C) 888 D) 1000

30.

*The end of the contest* 5

Solutions on Page 99 • Answers on Page 144

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# 1998-99 Annual 5th Grade Contest

*Spring, 1999*

**5**

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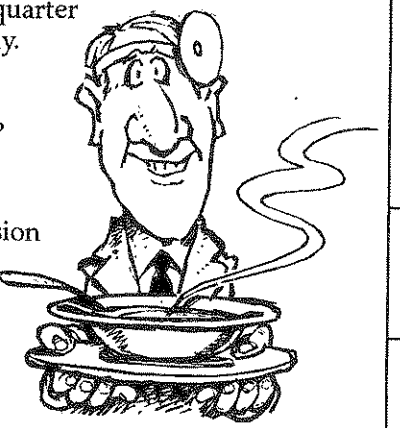
Answer Column

1. 1999 + 2001 + 1999 + 2001 + 1999 + 2001 + 1999 + 2001 = 1.
   A) 4000 B) 8000 C) 12 000 D) 16 000

2. One ten plus two hundreds plus three ones equals 2.
   A) 123 B) 213 C) 231 D) 312

3. Of the following, which is a whole number? 3.
   A) 25 ÷ 3 B) 26 ÷ 3 C) 27 ÷ 3 D) 28 ÷ 3

4. At *Soup From Doc*, it costs me a quarter for each tablespoon of soup I buy. How many more quarters do I need to buy seven tablespoons of soup than I need to buy four? 4.
   A) 3 B) 7 C) 75 D) 175



5. What is the quotient of the division $(2\times4\times6\times8) \div (1\times2\times3\times4)$? 5.
   A) 2 B) 4 C) 8 D) 16

6. The ones' digit of $56\times67\times78$ is 6.
   A) 8 B) 6 C) 4 D) 1

7. If yesterday were Monday, then 8 days from today would be 7.
   A) Monday B) Tuesday C) Wednesday D) Thursday

8. The ten-thousands' digit of 654 321 + the tens' digit of 654 321 = 8.
   A) 8 B) 7 C) 6 D) 5

9. A year's supply of Frisbees cost me $48.72. My average monthly cost for Frisbees is 9.
   A) $4.06 B) $4.60 C) $4.66 D) $6.00

10. What is the product of the quotient and the remainder when 1111 is divided by 22? 10.
    A) 25 B) 250 C) 550 D) 1100

11. Add the total number of sides in one triangle, one rectangle, and one hexagon. 11.
    A) 3 B) 11 C) 12 D) 13

*Go on to the next page* ➡

Answer Column

12. When 10 000 is divided by 9, the remainder is
A) 1 B) 3 C) 5 D) 7 — 12.

13. Polly was born on the 200th day of the year. Her birthday falls in
A) June B) July
C) August D) September — 13.

14. 753 is 357 more than
A) 396 B) 404 C) 406 D) 1110 — 14.

15. 13 hundreds + 13 tens + 13 ones =
A) 333 B) 1333 C) 1433 D) 1443 — 15.

16. The average of two odd numbers is always
A) odd B) even C) prime D) whole — 16.

17. Of the following, which is worth the most?
A) 45 nickels B) 11 dimes C) 5 quarters D) 1 dollar — 17.

18. If I spend one-third of my $120 gift, I'll have ? left.
A) $40 B) $60 C) $80 D) $90 — 18.

19. The difference between Grandpa's height and mine is 123 cm. If Grandpa's height is 202 cm, then my height is ? cm.
A) 77 B) 79 C) 87 D) 89 — 19.

20. I took a 7-week calendar and colored in every day that began with an S or a T. How many days stayed uncolored?
A) 49 B) 35 C) 28 D) 21 — 20.

21. The first of two numbers is 17 more than twice the second. If the first is 23, what is the sum of the two numbers?
A) 26 B) 40 C) 73 D) 96 — 21.

22. Of the following, which has more different whole number factors than the other three?
A) 4 B) 6 C) 9 D) 25 — 22.

Go on to the next page

Answer Column

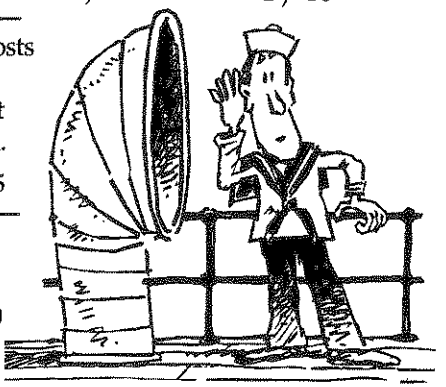
23. How many 10's is $(1 + 2 + 3 + 4) + (5 \times 2) + 10$?

A) 0 B) 1 C) 3 D) 30

23.

24. A single blast of Big Horn costs 50 cents. A double costs 75 cents. A $5 bill buys you at most ? blasts of Big Horn.

A) 10 B) 12 C) 13 D) 15



24.

25. Find the missing factor:
$20 \times 30 \times 40 = 2 \times 4 \times 6 \times$ ?

A) 10 B) 50 C) 100 D) 500

25.

26. The Bulls won 5 of the past 7 NBA championships. At this rate, they would win ? of the next 28 championships.

A) 15 B) 20 C) 23 D) 25

26.

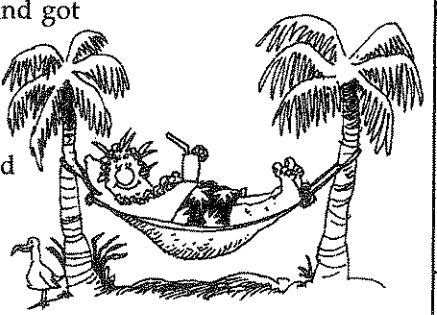
27. $(14 \times 11) + (13 \times 11) + (12 \times 11) + (11 \times 11) =$ ? $\times 11$.

A) 40 B) 50 C) 60 D) 61

27.

28. The 20 guests at Tropical Island got different whole numbers from 1 to 20. Whenever two guests added up to 21, they could share a hammock. How many hammocks were needed to accomodate these guests?

A) 10 B) 11 C) 20 D) 21



28.

29. Joan's grades so far are 90, 94, and 97. What must she average on her next two grades to average 95 for all five grades?

A) 97 B) 98 C) 99 D) 100

29.

30. There is only one prime number between

A) 50 and 60 B) 60 and 70 C) 80 and 90 D) 90 and 100

30.

*The end of the contest*



Solutions on Page 103 • Answers on Page 145

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# 1999-2000 Annual 5th Grade Contest

*Spring, 2000*

**5**

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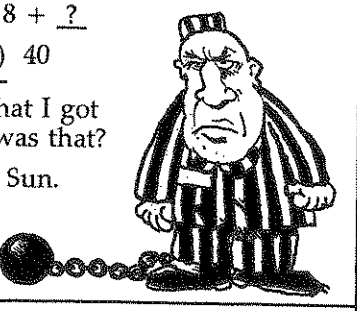
Answer Column

1. $12 + 14 + 16 + 18 = 2 + 4 + 6 + 8 + \underline{?}$
   A) 10 B) 20 C) 30 D) 40 — 1.

2. I'm wearing a chain and pendant that I got 17 days before Tuesday. What day was that?
   A) Thur. B) Fri. C) Sat. D) Sun. — 2.



3. $100 \div 5 = \underline{?} \times 5$
   A) 2 B) 4 C) 10 D) 20 — 3.

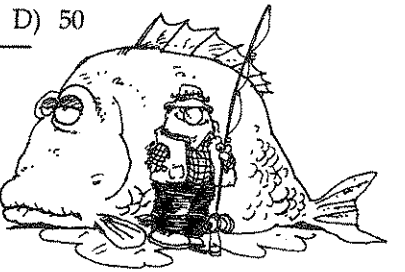
4. What is the product of the 5 smallest whole numbers?
   A) 0 B) 15 C) 120 D) 121 — 4.

5. The ones' digit of 246 810 is ? less than its hundreds' digit.
   A) 0 B) 1 C) 7 D) 8 — 5.

6. Two whole numbers whose difference is odd must have ? sum.
   A) a one-digit B) a prime C) an even D) an odd — 6.

7. The value of 5 quarters is the same as the value of ? nickels.
   A) 15 B) 20 C) 25 D) 50 — 7.

8. Gil the Fish weighs twice as much as Bill the Fisherman. If Gil weighs 150 kg, then Bill weighs ? kg.
   A) 75 B) 150 C) 225 D) 300 — 8.



9. $2 + 22 + 222 = 2 \times \underline{?}$
   A) $1 + 11 + 111$ B) $1 + 10 + 110$
   C) $2 + 12 + 112$ D) $1 + 12 + 24$ — 9.

10. (number of digits in ten million) ÷ (number of digits in one thousand) =
    A) 2 B) 8/3 C) 4 D) 10 000 — 10.

11. Add the number of sides in a triangle to the number of sides in a pentagon. The sum equals the number of sides in
    A) a square B) a rhombus C) a hexagon D) an octagon — 11.

12. If my secret number uses the digits 1, 2, and 3 once each, in some order, then you can guess my number in at most ? tries.
    A) 3 B) 4 C) 5 D) 6 — 12.

*Go on to the next page* ➠

Answer Column

13. Which number exceeds the difference between 300 and 100 by 500? 13.

A) 200 B) 300 C) 600 D) 700

14. 2 hours − ? minutes = 45 minutes 14.

A) 30 B) 75 C) 85 D) 155

15. Kyle cried 3 crocodile tears each day. How many tears did Kyle cry last week? 15.

A) 7 B) 10 C) 15 D) 21

16. Add 555 555 555 555 555 to itself. How many 0s appear in the sum? 16.

A) 1 B) 5 C) 15 D) 29

17. The ones' digit of the largest multiple of 7 that's less than 1000 is 17.

A) 3 B) 4 C) 7 D) 9

18. When ? is divided by 6, the remainder is 1. 18.

A) 612 481 230 B) 612 481 239 C) 612 481 238 D) 612 481 237

19. The average of 2000 fours equals the average of 1000 ?. 19.

A) twos B) fours C) sevens D) eights

20. How much longer is a side of a square with perimeter 36 cm than the width of a rectangle with area 36 $cm^2$ and length 18 cm? 20.

A) 4 cm B) 7 cm C) 32 cm D) 34 cm

21. How many kids are in the chorus if no one is younger than 10 years old, 20 kids are 10 or younger, 8 are older than 10, and 6 are older than 11? 21.

A) 22 B) 26 C) 28 D) 34

22. The number ? has more than two whole-number factors. 22.

A) 11 B) 13 C) 15 D) 17

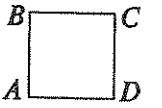
23. 40−39+38−37+36−35+34−33+ . . . −9+8−7+6−5+4−3+2−1 = 23.

A) 1 B) 20 C) 21 D) 40

Go on to the next page

Answer Column

24. In square $ABCD$, if $AB = 5$, then $AB + BC =$




A) $AD + AC$ B) $BC + BD$
C) $AC + BC$ D) $AD + AB$

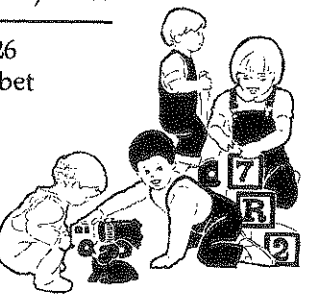
24.

25. The lengths of three sides of a ? could be 8 cm, 8 cm, and 16 cm.

A) rectangle B) square C) triangle D) circle

25.

26. A different whole number from 1 to 26 is assigned to each letter of the alphabet and written on the kindergarten's 26 alphabet blocks. What is the sum of the numbers assigned to the consonants plus the sum of the numbers assigned to the vowels?




A) 300 B) 326 C) 330 D) 351

26.

27. If the value of my seven coins is 57¢, I have exactly one

A) penny B) nickel C) dime D) quarter

27.

28. The difference between 19 992 000 and some smaller whole number equals the difference between some larger whole number and 19 992 000. The average of the smaller and larger whole numbers is

A) 6 664 000 B) 9 996 000 C) 19 992 000 D) 39 984 000

28.

29. Seven identical 2 m tall ice sculptures were carved so that one was completed at the end of each hour in a 7-hour period of time. Each sculpture shrank at the rate of 10 cm per hour. When completed, the last sculpture was ? cm taller than the first sculpture was at that very moment.

A) 50 B) 60 C) 70 D) 80

29.

30. Five boys and four girls are standing in a circle. Just two of the boys can say "Next to me is a boy." How many of the girls can say "Next to me is a girl"?

A) 0 B) 1 C) 2 D) 3

30.

*The end of the contest* 5

Solutions on Page 107 • Answers on Page 146

FIFTH GRADE MATHEMATICS CONTEST
Math League Press, P.O. Box 17, Tenafly, New Jersey 07670-0017

# 2000-2001 Annual 5th Grade Contest

*Spring, 2001*

**5**

## 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, not a test*—and 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 is an A, B, C, or D. Write each answer in the *Answer Column* to the right of each question. A correct answer is worth 1 point. Unanswered questions get no credit. You **may** use a calculator.

Answer Column

1. $30 + 40 + 50 = 80 + \underline{?}$

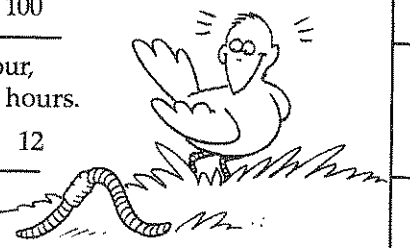
   A) 50 B) 40 C) 30 D) 20 — 1.

2. What number is 50 less than 100 more than 50?

   A) 25 B) 50 C) 75 D) 100 — 2.

3. If 2 worms crawl south every hour, then $\underline{?}$ worms crawl south in 6 hours.

   A) 3 B) 6 C) 8 D) 12 — 3.



4. $63 = (6 + 3) \times \underline{?}$

   A) 7 B) 8 C) 9 D) 10 — 4.

5. If every chocolate chip cookie contains 20 chocolate chips, then 100 chocolate chip cookies contain $\underline{?}$ chocolate chips.

   A) 5 B) 120 C) 200 D) 2000 — 5.

6. Of the following numbers, which is nearest in value to 111?

   A) 101 B) 109 C) 119 D) 121 — 6.

7. An express train travels twice as fast as a local train on the same route. If the local train travels the entire route in 6 hours, then the express train takes $\underline{?}$ hours to travel the entire route.

   A) 3 B) 4 C) 8 D) 12 — 7.

8. I got paid \$10 every day from June 8 through June 30, for a total of

   A) \$210 B) \$220 C) \$230 D) \$300 — 8.

9. $1 \times 2 \times 3 = (10 \times 20 \times 30) \div \underline{?}$

   A) 6 B) 10 C) 100 D) 1000 — 9.

10. Each of the following is a polygon *except* a

    A) circle B) rectangle C) square D) triangle — 10.

11. 11 tens + 11 ones =

    A) 110 B) 111 C) 121 D) 122 — 11.

*Go on to the next page* ➡

Answer Column

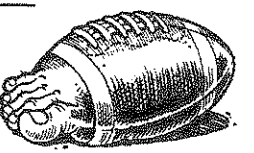
12. $5¢ + 50¢ + \$500 =$ 12.

A) \$5.55 B) \$50.55 C) \$500.55 D) \$555.00

13. I type 2400 words per hour, so I average ? words per minute. 13.

A) 24 B) 40 C) 60 D) 120

14. Paul buys a new football every 3 years. Paul bought his first football when he was 8. He bought his fifth football when he was 14.



A) 11 B) 19 C) 20 D) 23

15. A rectangle has exactly ? pairs of parallel sides. 15.

A) none B) 1 C) 2 D) 4

16. The average of all the odd numbers between 2 and 10 is 16.

A) 5 B) 6 C) 7 D) 8

17. Which two-digit number is twice the product of its digits? 17.

A) 18 B) 26 C) 36 D) 66

18. 20 dimes + 20 nickels = ? quarters 18.

A) 10 B) 12 C) 20 D) 300

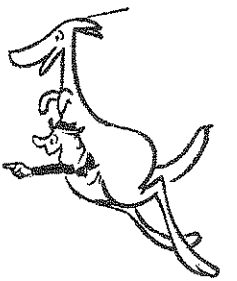
19. The time 10 hours after 10 A.M. is also the time 10 hours before 19.

A) 6 A.M. B) 4 A.M. C) 10 P.M. D) 8 P.M.

20. The tens' digit of the product $110 \times 120 \times 130 \times 140 \times 150$ is a 20.

A) 0 B) 1 C) 5 D) 6

21. 1 hip = 3 hops and 3 hops = 2 hip-hops, so ? hips = 12 hip-hops. 21.



A) 4 B) 6 C) 9 D) 18

22. What is the greatest possible remainder when an odd number is divided by 9? 22.

A) 0 B) 1 C) 7 D) 8

Answer Column

23. Now, Tina is 10 years older than Ike was 5 years ago. Ike is 15 now. How old will Tina be in 2 years?
A) 27 B) 25 C) 22 D) 20

23.

24. 2 weeks = 7 days + ? hours.
A) 24 B) 168 C) 240 D) 336

24.

25. Without folding the paper, I can cut a smaller paper square from a larger one with ? (and no fewer) straight cuts with scissors.
A) 1 B) 2 C) 4 D) 8

25.

26. Of the following quotients, which has an odd remainder?
A) $156 \div 12$ B) $259 \div 3$ C) $355 \div 5$ D) $455 \div 3$

26.

27. The product $100 \times 200 \times 300 \times 400$ has ? different digits besides 0.
A) 1 B) 2 C) 3 D) 4

27.

28. At a recent *Sing Thing*, it was found that, together, Ann & Bob weigh 180 kg, Carl & Dee weigh 210 kg, and Ann & Carl weigh 220 kg. Together, Bob & Dee weigh
A) 170 kg B) 180 kg
C) 190 kg D) 200 kg


28.

29. For how many whole numbers between 100 and 999 does the product of the ones' and tens' digits equal the hundreds' digit?
A) 18 B) 19 C) 21 D) 23

29.

30. Of all rectangles that can be formed from thirty $4 \times 4$ squares, the one with the greatest perimeter has a perimeter of
A) 88 B) 136 C) 248 D) 480

30.

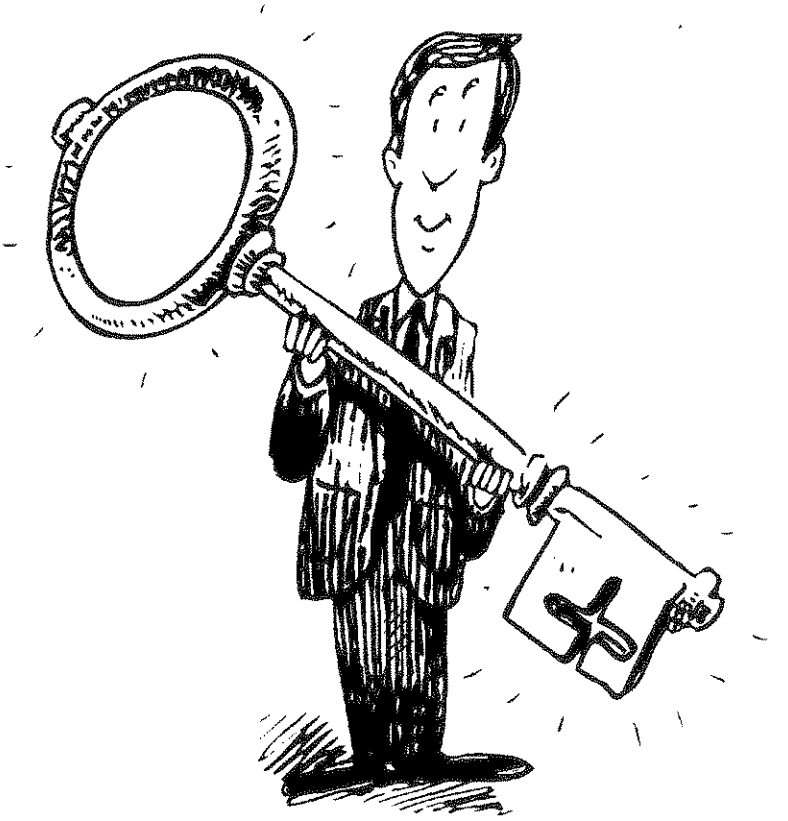
*The end of the contest*



Solutions on Page 111 • Answers on Page 147

# Answer Keys & Difficulty Ratings

## 1996-1997 through 2000-2001

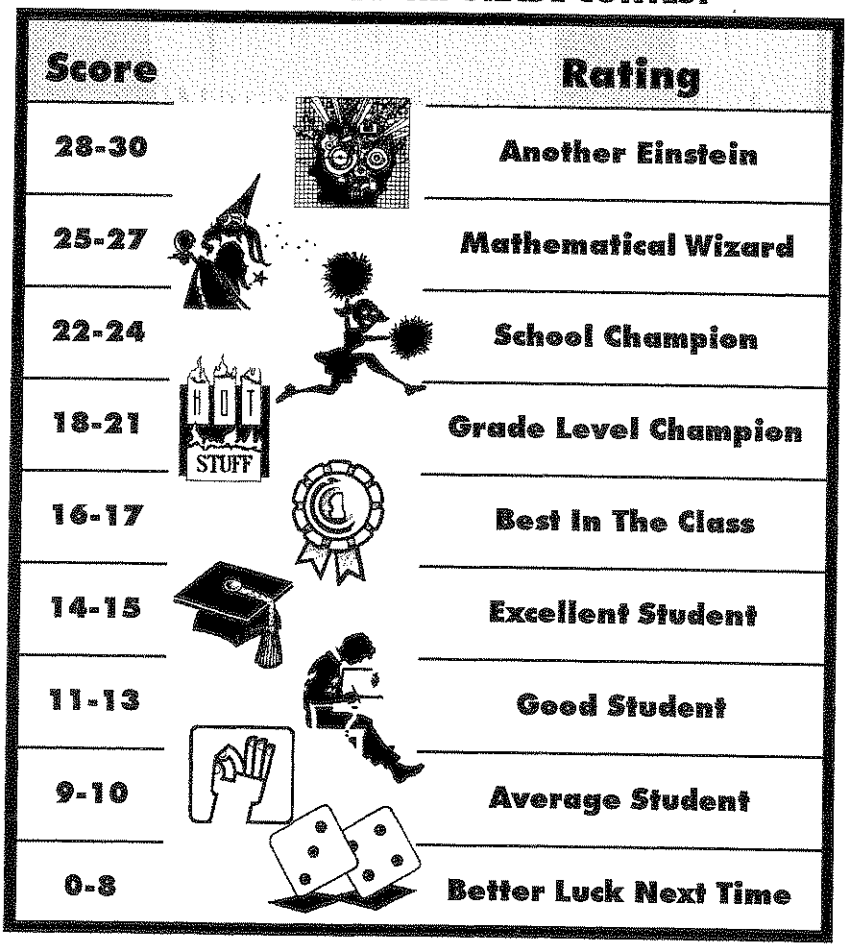


## ANSWERS, 1996-97 4th Grade Contest

| | | | | |
|---|---|---|---|---|
| 1. B | 7. A | 13. C | 19. A | 25. D |
| 2. D | 8. A | 14. C | 20. A | 26. B |
| 3. C | 9. B | 15. D | 21. B | 27. A |
| 4. B | 10. C | 16. A | 22. B | 28. C |
| 5. D | 11. A | 17. C | 23. B | 29. B |
| 6. D | 12. C | 18. D | 24. C | 30. C |

# RATE YOURSELF!!!

### for the 1996-97 4th GRADE CONTEST



## ANSWERS, 1997-98 4th Grade Contest

| | | | | |
|---|---|---|---|---|
| 1. B | 7. A | 13. D | 19. B | 25. A |
| 2. D | 8. D | 14. B | 20. D | 26. C |
| 3. B | 9. C | 15. B | 21. B | 27. A |
| 4. A | 10. D | 16. D | 22. C | 28. C |
| 5. C | 11. A | 17. C | 23. A | 29. D |
| 6. C | 12. B | 18. C | 24. B | 30. C |

# RATE YOURSELF!!!

### for the 1997-98 4th GRADE CONTEST

| Score | Rating |
|---|---|
| 27-30 | Another Einstein |
| 24-26 | Mathematical Wizard |
| 21-23 | School Champion |
| 18-20 | Grade Level Champion |
| 15-17 | Best In The Class |
| 13-14 | Excellent Student |
| 11-12 | Good Student |
| 9-10 | Average Student |
| 0-8 | Better Luck Next Time |

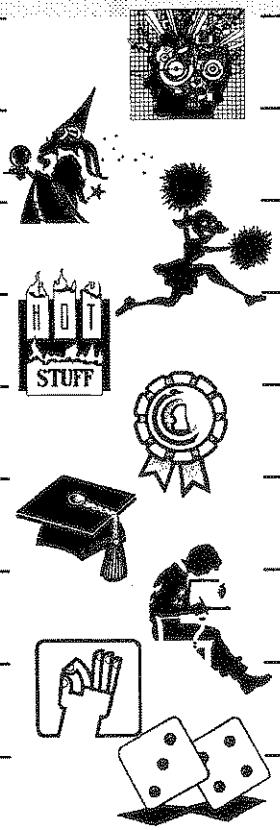
## ANSWERS, 1996-97 5th Grade Contest

| | | | | |
|---|---|---|---|---|
| 1. B | 7. C | 13. A | 19. B | 25. D |
| 2. A | 8. D | 14. A | 20. D | 26. A |
| 3. B | 9. B | 15. D | 21. B | 27. C |
| 4. A | 10. C | 16. B | 22. C | 28. B |
| 5. A | 11. D | 17. D | 23. A | 29. C |
| 6. C | 12. C | 18. A | 24. D | 30. B |

# RATE YOURSELF!!!

### for the 1996-97 5th GRADE CONTEST

| Score | Rating |
|---|---|
| 29-30 | Another Einstein |
| 27-28 | Mathematical Wizard |
| 24-26 | School Champion |
| 21-23 | Grade Level Champion |
| 18-20 | Best In The Class |
| 16-17 | Excellent Student |
| 14-15 | Good Student |
| 11-13 | Average Student |
| 0-10 | Better Luck Next Time |



## ANSWERS, 1997-98 5th Grade Contest

| | | | | |
|---|---|---|---|---|
| 1. D | 7. A | 13. C | 19. A | 25. A |
| 2. D | 8. B | 14. C | 20. B | 26. C |
| 3. C | 9. D | 15. B | 21. D | 27. C |
| 4. A | 10. C | 16. A | 22. D | 28. B |
| 5. B | 11. D | 17. B | 23. B | 29. A |
| 6. C | 12. A | 18. C | 24. D | 30. A |

# RATE YOURSELF!!!

### for the 1997-98 5th GRADE CONTEST

| Score | Rating |
|---|---|
| 28-30 | Another Einstein |
| 25-27 | Mathematical Wizard |
| 23-24 | School Champion |
| 20-22 | Grade Level Champion |
| 18-19 | Best In The Class |
| 15-17 | Excellent Student |
| 12-14 | Good Student |
| 9-11 | Average Student |
| 0-8 | Better Luck Next Time |

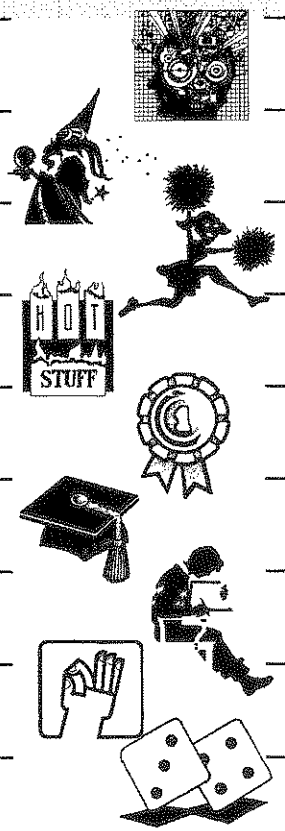
## ANSWERS, 1998-99 5th Grade Contest

| | | | | |
|---|---|---|---|---|
| 1. D | 7. C | 13. B | 19. B | 25. D |
| 2. B | 8. B | 14. A | 20. D | 26. B |
| 3. C | 9. A | 15. D | 21. A | 27. B |
| 4. A | 10. C | 16. D | 22. B | 28. A |
| 5. D | 11. D | 17. A | 23. C | 29. A |
| 6. B | 12. A | 18. C | 24. C | 30. D |

# RATE YOURSELF!!!

### for the 1998-99 5th GRADE CONTEST

| Score | Rating |
|---|---|
| 28-30 | Another Einstein |
| 25-27 | Mathematical Wizard |
| 23-24 | School Champion |
| 19-22 | Grade Level Champion |
| 16-18 | Best In The Class |
| 13-15 | Excellent Student |
| 11-12 | Good Student |
| 9-10 | Average Student |
| 0-8 | Better Luck Next Time |



## ANSWERS, 1999-00 5th Grade Contest

| | | | | |
|---|---|---|---|---|
| 1. D | 7. C | 13. D | 19. B | 25. A |
| 2. C | 8. A | 14. B | 20. B | 26. D |
| 3. B | 9. A | 15. D | 21. C | 27. D |
| 4. A | 10. A | 16. A | 22. C | 28. C |
| 5. D | 11. D | 17. B | 23. B | 29. B |
| 6. D | 12. D | 18. D | 24. D | 30. A |

# RATE YOURSELF!!!

### for the 1999-00 5th GRADE CONTEST

| Score | Rating |
|---|---|
| 28-30 | Another Einstein |
| 26-27 | Mathematical Wizard |
| 23-25 | School Champion |
| 21-22 | Grade Level Champion |
| 17-20 | Best In The Class |
| 15-16 | Excellent Student |
| 12-14 | Good Student |
| 10-11 | Average Student |
| 0-9 | Better Luck Next Time |

## ANSWERS, 2000-01 5th Grade Contest

| | | | | |
|---|---|---|---|---|
| 1. B | 7. A | 13. B | 19. A | 25. B |
| 2. D | 8. C | 14. C | 20. A | 26. B |
| 3. D | 9. D | 15. C | 21. B | 27. B |
| 4. A | 10. A | 16. B | 22. D | 28. A |
| 5. D | 11. C | 17. C | 23. C | 29. D |
| 6. B | 12. C | 18. B | 24. B | 30. C |

# RATE YOURSELF!!!

### for the 2000-01 5th GRADE CONTEST