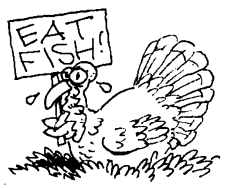
1. $1000 + 0 + 900 + 0 + 90 + 0 + 5 + 0 =$
   A) 1995 B) 19 950 C) 199 500 D) 1 995 000 — 1.

2. Which number is nine hundred less than one thousand one?
   A) 99 B) 100 C) 101 D) 1901 — 2.

3. A triangle has sides of lengths 2, 2, and 3. This triangle is
   A) scalene B) isosceles C) right D) equilateral — 3.

4. This year, there were $11\times121-11\times11$ fewer turkeys eaten than last year. How many fewer turkeys were eaten this year?
   A) 120 B) 121 C) 1200 D) 1210 — 4.



5. 200% of 50% equals
   A) 1% B) 100% C) 250% D) 10 000% — 5.

6. $(1995 + 1994 + 1993) - (1992 + 1991 + 1990) = 1990 - \underline{?}$
   A) 1999 B) 1993 C) 1987 D) 1981 — 6.

7. How many positive primes have remainder 0 when divided by 2?
   A) 0 B) 1 C) 2 D) 7 — 7.

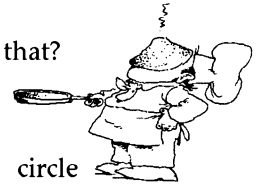
8. Divide $(1+4)+(1+8)+(1+12)+(1+16)$ by 4. The remainder is
   A) 0 B) 1 C) 2 D) 3 — 8.

9. All the figures below consist of the same four squares of equal size. Which figure has the smallest perimeter?
   A) B) C) D) — 9.

10. The greatest common divisor of 999 999 and $2\times2\times2\times2\times2\times2$ is
    A) 1 B) 2 C) 3 D) 9 — 10.

11. What number, when added to 1111, results in a sum of 10100?
    A) 8989 B) 9090 C) 9191 D) 11211 — 11.

12. A flapjack flipping chef trainee "missed" $4-0\times2-0\times1$ times. How many "misses" is that?
    A) 0 B) 2 C) 4 D) 8 — 12.



13. Of the following, which is *not* a polygon?
    A) triangle B) rhombus C) pentagon D) circle — 13.

14. $111111 + 111111 + 111111 + 111111 + 111111 + 222222 =$
    A) 1 111 111 B) 333 333 C) 666 666 D) 777 777 — 14.

15. Pat wrote a word in secret code. In this code, the number 26 stood for the letter "A," the number 25 stood for "B," and so on. In this code, the 5 numbers 19 26 11 11 2 stand for the word
    A) RATTY B) HAPPY C) HOPPY D) DANNY — 15.

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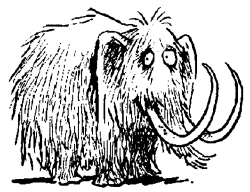
16. 10 quarters + 10 nickels + 10 pennies has the same value as
    A) 11 dimes B) 21 dimes C) 30 dimes D) 31 dimes — 16.

17. To the nearest hundred years, how old is a 3456-year-old Woolly Mammoth?
    A) 3000 B) 3400 C) 3500 D) 3460 — 17.



18. $(10\div1)+(20\div2)+(30\div3)+(40\div4) = \underline{?} \div 5$.
    A) 200 B) 100 C) 40 D) 8 — 18.

19. If the product of an even number and an odd number is 840, what is the largest possible value of this odd number?
    A) 21 B) 35 C) 105 D) 420 — 19.

20. What is the sum of the two largest primes less than 30?
    A) 48 B) 52 C) 56 D) 68 — 20.

21. $8 \div 4 \times 2 + 4 \times 2 \div 8 =$
    A) 2 B) 3 C) 4 D) 5 — 21.

22. A bakery lowered its price for cookies from 25¢ each to 20¢ each. For $4, how many more cookies could you buy now than before?
    A) 1 B) 4 C) 5 D) 20 — 22.

23. Thirty-three minutes after 11 A.M. is $\underline{?}$ minutes before 1 P.M.
    A) 27 B) 87 C) 93 D) 97 — 23.

24. The average of 7 whole numbers is 7. If 6 of these numbers are 1, then the seventh number must be
    A) 1 B) 7 C) 13 D) 43 — 24.

25. $5\times5\times5\times2\times2\times2\times2\times2 = 4\times\underline{?}$
    A) 125 B) 125×2 C) 125×4 D) 125×8 — 25.

26. Bob has only enough paint to cover a wall 12m by 15m. At most how many different squares of size 3m by 3m can he paint on that wall?
    A) 9 B) 18 C) 20 D) 60 — 26.

27. 1995199519951995 ÷ 1995 =
    A) 1111 B) 1010101
    C) 1001001001 D) 1000100010001 — 27.

28. If 5 widgets = 10 fidgets, then 8 fidgets = $\underline{?}$ widgets.
    A) 3 B) 4 C) 13 D) 16 — 28.

29. An isosceles right triangle must have an angle of measure
    A) 10° B) 40° C) 45° D) 100° — 29.

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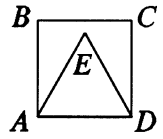
30. Of the following, which has an odd quotient when divided by 2? — 30.
A) 456 456 456 456 456 B) 678 678 678 678 678
C) 432 432 432 432 432 D) 876 876 876 876 876

31. As shown, *ABCD* is a square and *ADE* is an equilateral triangle. What is the degree-measure of angle *BAE*? — 31.



A) 30° B) 45° C) 60° D) 90°

32. Each of the following ratios is equal to 15:60 *except* — 32.
A) $\frac{1}{2}:2$ B) 11111:44444 C) $1:\frac{1}{4}$ D) $10^6:(4\times10^6)$

33. Lee multiplied three different prime numbers together. How many different whole numbers are factors of this product? — 33.
A) 3 B) 6 C) 8 D) 9

34. $(1995-1993)\times(1993-1991)\times(1991-1989)\times \ldots \times(5-3)\times(3-1) =$ — 34.
A) 2×996 B) 2×997 C) 2^{996} D) 2^{997}

35. The lengths of a side of square *S* and a radius of circle *C* are equal. What is the area of *C* divided by the area of *S*? — 35.
A) π B) 2π C) 4π D) 4

36. The product of 6 whole numbers is 36. What is the least possible value of their sum? — 36.
A) 8 B) 12 C) 14 D) 16

37. If the pattern of the first 6 letters in *CIRCUSCIRCUS* . . . continues, then the pattern's 500th letter is — 37.

A) *R* B) *U* C) *C* D) *I*

38. I made a list of three-digit whole numbers, and every digit I used was odd. At most how many different numbers were on my list? — 38.
A) 125 B) 150 C) 333 D) 450

39. $2^{1000} + 2^{1000} =$ — 39.
A) 2^{1001} B) 2^{2000} C) 4^{1000} D) 4^{2000}

40. I multiplied one whole number by 18.
I multiplied a second whole number by 21.
I then added the two products. Of the following, which *could* have been the resulting sum? — 40.

A) 1996 B) 1997 C) 1998 D) 1999

The end of the contest 6

SIXTH GRADE MATHEMATICS CONTEST

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

1994-95 Annual 6th Grade Contest

Tuesday, March 14, 1995

6

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.
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