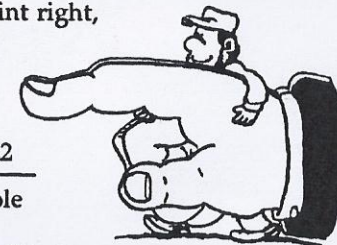
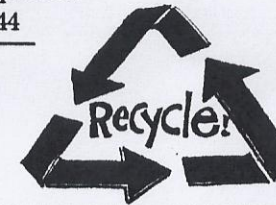


1. When an odd number is divided by 2, the remainder is always  
A) 0      B) 1      C) 2      D) prime
2. Of 60 men wearing a ball and chain, twice as many prefer stripes as prefer solids. How many prefer stripes?  
A) 15      B) 20      C) 30      D) 40
3. ? is the square of a whole number.  
A) 4444      B) 444      C) 44      D) 4
4.  $88 \times 44 = 11 \times 11 \times ?$   
A) 12      B) 20      C) 32      D) 122
5. Twice my age, plus 9, is 37. How old am I?  
A) 14      B) 15      C) 19      D) 28
6.  $(110+120+130+140)-(10+20+30+40) =$   
A) 270      B) 310      C) 330      D) 400
7.  $2^2+2^2+2^2+2^2 =$       A)  $4^2$       B)  $8^2$       C)  $16^2$       D)  $22^2$
8. The expression  $7 \times 7 + 7 \times 7$  has the same value as ?  $\times 7$ .  
A) 14      B) 21      C) 49      D) 56
9. (number of digits in 1000000) : (number of digits in 12 million) =  
A) 1:12      B) 1:2      C) 3:4      D) 7:8
10.  $111+999 = 5 \times ?$       A) 110      B) 111      C) 220      D) 222
11. What is the difference between the area and the perimeter of a square with side-length 6?  
A) 6      B) 12      C) 18      D) 24
12. At my fastest, I can carve 40 letters a day. At that rate, I'll need ? days to carve 180 letters.  
A) 4      B)  $4\frac{1}{2}$       C) 5      D)  $5\frac{1}{2}$
13. 11 hundreds = 111 tens - ?  
A) 0      B) 1      C) 10      D) 11
14. 25% of one hour = ? minutes  
A) 10      B) 12      C) 15      D) 25
15.  $3^2 \times 3^2 \div 3 = 3 \times ?$       A) 1      B) 3      C)  $3^2$       D)  $3^3$
16. (989 rounded to the nearest ten) - (989) =  
A) 0      B) 1      C) 3      D) 10



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17. Each face of a cube is a square. A cube has ? faces.  
A) 2      B) 3      C) 4      D) 6
18. What is the largest odd divisor of 2004?  
A) 3      B) 167      C) 501      D) 1001
19. The average degree-measure of the angles of a triangle is  
A)  $30^\circ$       B)  $45^\circ$       C)  $60^\circ$       D)  $90^\circ$
20. Half my number is 6. My number's square is  
A) 9      B) 36      C) 81      D) 144
21. A triangle with whole number sides has perimeter 6. How many of these sides must have the same length?  
A) 3      B) 2      C) 1      D) 0
22. The value of  $3 \times 4$  quarters equals the value of  $5 \times 6$  ?.  
A) dimes      B) dollars      C) nickels      D) pennies
23. Each of the following has four divisors *except*  
A) 6      B) 8      C) 9      D) 10
24.  $\sqrt{4^2+4^2+4^2+4^2} = 2 \times ?$   
A) 4      B) 8      C)  $4^2$       D)  $8^2$
25. Exactly how many prime numbers less than 40 have 2 digits?  
A) 7      B) 8      C) 13      D) 14
26. Of 30 hands, 10 point left, 10 point right, and 10 don't point at all. I need to have ? of these 30 hands to be certain that I have at least 2 left-pointing hands.  
A) 6      B) 11      C) 21      D) 22
27. The largest of 5 consecutive whole numbers whose average is 10 is  
A) 10      B) 12      C) 13      D) 15
28. I have equal numbers of quarters, dimes, nickels, and pennies. The value of these coins could be any of the following *except*  
A) 41¢      B) \$1.23      C) \$1.68      D) \$2.46
29. If 30% of a number is 60, then 70% of the number is  
A) 70      B) 100      C) 130      D) 140
30. I was half my current age 10 years ago, so 4 years ago my age was  
A) 20      B) 16      C) 14      D) 6








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544  
2003-2004 6TH GRADE CONTEST

Answers

31. Four identical squares, lined up as shown, form a rectangle whose area is 144. What is the perimeter of the shaded region?		31.
A) 36      B) 48      C) 60      D) 108		
32. If the product of 6 different positive integers is 120 000, then what is the greatest possible value of one of the 6 integers?		32.
A) 1000      B) 2000      C) 3000      D) 6000		
33. If every gumball weighs 3 g, then a machine holding 3 kg of gumballs holds ? gumballs.		33.
A) 100      B) 300      C) 1000      D) 3000		
34. How many 3-digit numbers greater than 100 read the same forwards and backwards, like 575?		34.
A) 81      B) 90      C) 99      D) 100		
35. If the first of 1000 consecutive whole numbers is odd, their sum must be		35.
A) even      B) odd      C) prime      D) negative		
36. You'll get a triangle if you connect any 3 of the dots at the right. You can get at most ? different such triangles.		36.
A) 2      B) 3      C) 4      D) 5		
37. Any of the ten digits 0 through 9 may be used in a 6-digit code, but no digit may be used more than once. If the first two digits are 1 and 7, what is the largest possible average of all 6 digits?		37.
A) 4      B) 6      C) $6\frac{1}{2}$ D) 7		
38. Coach ran 4 km in 30 minutes. He ran the first 2 km at a constant speed that was twice the constant speed at which he ran the last 2 km. Coach ran the third km at a speed of ? km/hr.		38.
A) 4      B) 6      C) 8      D) 12		
39. Of the following products, which has the most prime factors?		39.
A) $1 \times 121$ B) $11 \times 15$ C) $7 \times 19$ D) $6 \times 35$		
40. A month with 30 days had 5 Saturdays and 5 Sundays. The first day of that month had to fall on a		40.
A) Thursday      B) Friday      C) Saturday      D) Sunday		

The end of the contest  6

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