

5th
2002-2003 5TH GRADE CONTEST SOLUTIONS

Answers

1. $20+60 = 80 = 20 \times 4$. A) 2 B) 3 C) 4 D) 6
2. Two years ago, each was 2 years younger; so the sum was 4 less.
A) 24 B) 26 C) 30 D) 32
3. If I eat 50 drops of ice cream each minute, it will take me 2 minutes to eat 100 drops and 3 minutes for 150 drops.
A) $1\frac{1}{2}$ B) 2 C) $2\frac{1}{2}$ D) 3
4. $(9+1+8+2) \div (7+3+6+4) = 20 \div 20 = 1$.
A) 0 B) 1 C) 5 D) 20
5. Square has 4 sides, triangle 3, and $4-3 = 1$.
A) 7 B) 4 C) 3 D) 1
6. $144 \times 60 = (72 \times 2) \times 60 = 72 \times 120$. A) 72 B) 120 C) 132 D) 140
7. The gcd of 8 and 4 is 4. The gcd of 8 and 12 is also 4.
A) 12 B) 14 C) 16 D) 40
8. $9 \times 89 = 801 = 899 - 98 = 801$, so choice C is correct.
A) 9×98 B) 899×1 C) $899 - 98$ D) $989 - 89$
9. (# of digits in 1 000 000) : (# of digits in 10 000) = 7:5.
A) 2:1 B) 6:5 C) 7:5 D) 5:3
10. $6400 \div 80 = 80 = 80 \times 1$. A) 1 B) 80 C) 800 D) 6400
11. Since there are 26 letters in all, 24 come before Y and 1 comes after.
A) X B) B C) C D) Y
12. The day after Tuesday is Wednesday. Three days before Wednesday is Sunday. Mr. Sheep got his diploma on a Sunday.
A) Wed. B) Fri. C) Sat. D) Sun.
13. Every carton holds 12 = 1 dozen eggs; 60 cartons hold 60 dozen.
A) 12 dozen B) 60 dozen C) 144 dozen D) 720 dozen
14. $789+98 = (89+700)+98 = 89+798$. A) 987 B) 878 C) 798 D) 177
15. Since 1 is not a prime, the smallest product of primes is $2 \times 3 = 6$.
A) 0 B) 3 C) 5 D) 6
16. $3^2 + 4^2 = 25 = 5^2$. A) 5^2 B) 7^2 C) 12^2 D) 34^2



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17. Since $0+0 = 0-0 = 0$, their product is $0 \times 0 = 0$.
A) 0 B) 1 C) 2 D) 4
18. Since $90 = 9 \times 10$ and $10-9 = 1$, choice C is correct.
A) 63 B) 80 C) 90 D) 99
19. On vacation, my front teeth hurt on 4 days. My front teeth were OK on 8 days. My vacation lasted $4+8 = 12$ days.
A) 2 B) 6 C) 8 D) 12
20. $4 \text{ km} = 4000 \text{ m}$, $400 \text{ cm} = 4 \text{ m}$; $4004 \div 2 = 2002$.
A) 202 B) 220 C) 2002 D) 22 000
21. Each of 12 pizzas was cut into 8 slices, for a total of 96 slices. Slices eaten = $96-4 = 92$. Number of people = $92 \div 2 = 46$.
A) 46 B) 48 C) 92 D) 96
22. If it were a square, its dimensions would be 6×6 . But it's not.
A) 4 B) 6 C) 9 D) 12
23. 28 and 32 are divisible by 1, 2, and 4, the 3 common factors.
A) 2 B) 3 C) 4 D) 5
24. $12 \div 6 = 2$; $12 \div 4 = 3$; 12 is the LCM of 4 and 6.
A) 2 B) 6 C) 12 D) 24
25. Only choice B results in a prime after 1 is subtracted: $48-1 = 47$, which is a prime.
A) 46 B) 48 C) 50 D) 53
26. $225 \div 15 = 15$, and $150 \div 15 = 10$, so Di can buy $15-10 = 5$ more than Al.
A) 5 B) 10 C) 15 D) 25
27. Add first, then round: $3.83+2.34 = 6.17$. Round up to 6.2.
A) 6.1 B) 6.17 C) 6.18 D) 6.2
28. It's now 12:31 P.M., so 31 minutes later is 1:02 P.M.
A) 12:31 A.M. B) 1:02 A.M. C) 12:31 P.M. D) 1:02 P.M.
29. If the larger of two consecutive whole numbers has one more digit than the smaller, their ones' digits must be 9 and 0.
A) 10 B) 9 C) 1 D) 0




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30. Dave ran 2 km at 8 km/hr, so it took him $(60 \div 4)$ min. Andy ran 2 km at 10 km/hr, so it took him $(60 \div 5)$ min. Diff. is $15 - 12 = 3$. A) 2 B) 3 C) 12 D) 15	30. B
31. (My current age - 10) + (my current age + 10) = $2 \times$ (my current age), so A is the answer. A) 2 B) 3 C) 4 D) 10	31. A
32. Every 4 seasons, it's winter. Since 2003 = $(4 \times 500) + 3$, Dino becomes an adult 3 seasons after winter, in autumn. A) spring B) summer C) autumn D) winter	32. C
33. 35 sips = 10 slurps; 10 slurps = 4 gulps; so 35 sips = 4 gulps. A) 3 gulps B) 4 gulps C) 5 gulps D) 7 gulps	33. B
34. The width of a 3×6 rectangle is half the length, and the area is 18. A square with the same width would have an area of $3^2 = 9$. A) 6 B) 9 C) 27 D) 36	34. B
35. My address is a 2-digit number. The product and sum of the digits are equal. Since $2 + 2 = 4 = 2 \times 2$, my address is 22. A) 10 B) 11 C) 21 D) 22	35. D
36. It takes me (52×2) weeks = 104 weeks to read 52 books. A) 26 weeks B) 52 weeks C) 54 weeks D) 104 weeks	36. D
37. All such numbers must be odd, but need not be prime; try $143 = 11 \times 13$. A) even B) prime C) odd D) negative	37. C
38. The minute hand goes once around the face of a circular clock each hour. To go around 60 times would take 60 hours. A) 1 B) 60 C) 360 D) 3600	38. B
39. From 100 to 999, there are $999 - 100 + 1 = 900$ 3-digit numbers. A) 1000 B) 999 C) 900 D) 899	39. C
40. Since $2^2 + 3^2 + 4^2 = 4 + 9 + 16 = 29$, the sides of the squares are 2, 3, and 4. A side of the largest square is 4. A) 4 B) 5 C) 9 D) 16	40. A

The end of the contest  6

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