Answers

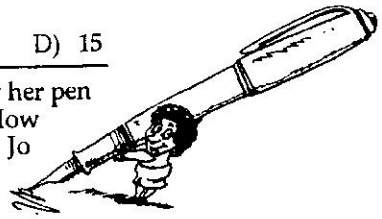
1. What is the difference between 34 343 and 1212?
   A) 13 133 B) 22 223 C) 32 222 D) 33 131 — 1.

2. $(100 - 40) + (90 - 30) + (80 - 20) = 3 \times$?
   A) 20 B) 60 C) 80 D) 180 — 2.

3. When $(9999 + 999 + 99 + 4)$ is divided by 9, the remainder is
   A) 1 B) 3 C) 4 D) 5 — 3.

4. Divide one million by five hundred thousand. The quotient is
   A) 2 B) 10 C) 20 D) 50 — 4.

5. $2^4 - 2^3 - 2^2 - 2^1 = 16 -$?
   A) 1 B) 2 C) 14 D) 15 — 5.

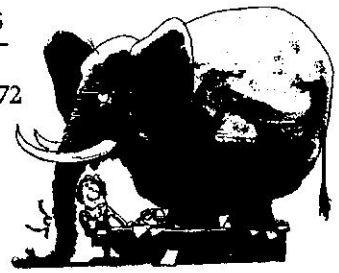


6. Jo is the 12th of 25 people to get her pen "biggie-sized" at McBurgers. How many people are there *between* Jo and the 25th person on line?
   A) 11 B) 12 C) 13 D) 14 — 6.

7. What is the sum of the first four odd whole numbers?
   A) 6 B) 9 C) 10 D) 16 — 7.

8. What is the tens' digit of the product $22\,222 \times 22\,222$?
   A) 8 B) 6 C) 4 D) 2 — 8.

9. $8777 - 7778 = 444 +$?
   A) 445 B) 455 C) 545 D) 555 — 9.



10. Altogether, if 12 of our small elephant balloons weigh 130 kg, then 72 of these same balloons weigh
    A) 190 kg B) 650 kg C) 780 kg D) 864 kg — 10.

11. 500 is midway between 350 and
    A) 200 B) 650 C) 700 D) 850 — 11.

12. The number of dimes in \$4 equals the number of quarters in
    A) \$6 B) \$8 C) \$10 D) \$40 — 12.

13. How many different positive factors are common to 36 and 48?
    A) 4 B) 5 C) 6 D) 8 — 13.

14. The smallest composite number *without* 2, 3, or 5 as a factor is
    A) 41 B) 49 C) 67 D) 77 — 14.

15. The average of sixteen 4s, times the average of four 16s, equals
    A) 4×16 B) 16×16 C) 16×64 D) 64×64 — 15.

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Answers

16. The number 2002 is the product of exactly ? positive primes.
    A) 2 B) 3 C) 4 D) 5 — 16.

17. Counting 3 million birds at a rate of 80 birds per minute takes
    A) 470 minutes B) 625 minutes
    C) 2500 minutes D) 37 500 minutes — 17.

18. $(10^3 \times 1000) + (10^2 \times 100) + (10^1 \times 10) =$
    A) $10^6 + 10^4 + 10^2$ B) $2 \times (10^3 + 10^2 + 10^1)$
    C) 10^{12} D) $10^9 + 10^4 + 10^1$ — 18.

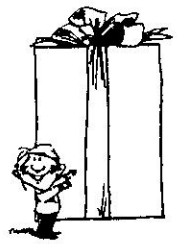
19. Of the following, which has the greatest value?
    A) 20% of 80 B) 25% of 65 C) 30% of 50 D) 35% of 35 — 19.

20. How many different whole numbers are factors of 120?
    A) 5 B) 11 C) 15 D) 16 — 20.

21. If the product of 3 whole numbers is even, their sum must be
    A) even B) odd C) prime D) whole — 21.

22. What is the sum of 5 numbers whose average is 5 more than 5?
    A) 10 B) 25 C) 50 D) 125 — 22.

23. For the first 50 whole numbers, the ratio (primes):(even numbers) is
    A) 15:25 B) 16:25 C) 15:35 D) 16:34 — 23.



24. $\sqrt{(25-9)+(25-9)+(25-9)+(25-9)} =$
    A) $\sqrt{4 \times 16}$ B) $4 \times \sqrt{16}$
    C) $6 + \sqrt{100}$ D) $\sqrt{100} - \sqrt{36}$ — 24.

25. After Sam spent 35% of his money on a gift, he had \$13 left. How much did the gift cost?
    A) \$6 B) \$7 C) \$20 D) \$23 — 25.

26. The largest whole number which satisfies ? :7 < 7:16 is
    A) 2 B) 3 C) 4 D) 5 — 26.

27. The 5th of 9 consecutive whole numbers whose sum is 153 is
    A) 9 B) 13 C) 17 D) 21 — 27.

28. The sum of any 3 angles of a rectangle is
    A) 120° B) 180° C) 270° D) 360° — 28.

29. Jack was 8 when Jill was 2. Now that Jack is twice as old as Jill, he is teaching her how to ice skate. The sum of their ages now is
    A) 8 B) 9 C) 12 D) 18 — 29.

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Answers

30. The product of 4 different whole numbers could *not* equal
A) 2^4 B) 2^6 C) 2^8 D) 2^{12} — 30.

31. Each of 5 bikers sang a duet with each of the others. A total of ? duets were sung.
A) 10 B) 15 C) 20 D) 25 — 31.

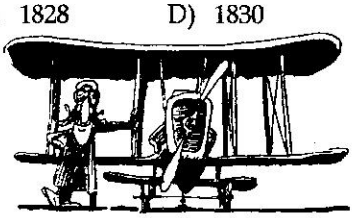
32. $200^3 \div 100^3 = 200 \div$?
A) 100 B) 80 C) 25 D) 8 — 32.

33. How many whole numbers less than 1000 are *not* divisible by 4?
A) 875 B) 850 C) 800 D) 750 — 33.

34. If the sum of 2 whole numbers is 76, their product is at most
A) 5776 B) 5700 C) 1444 D) 1443 — 34.

35. Between 1901 and 2001, it was possible for a period of 5 consecutive calendar years to contain a total of ? days.
A) 1825 B) 1827 C) 1828 D) 1830 — 35.

36. A plane left New York at 2 P.M. and landed in Vancouver 6 hours later. If New York time is 3 hours ahead of Vancouver time, when did the plane land, in Vancouver time?
A) 11 P.M. B) 9 P.M. C) 8 P.M. D) 5 P.M. — 36.



37. If a radius of one circle with area 16π cm^2 is used as a diameter of a second circle, how far apart are the centers of the two circles?
A) 2 cm B) 4 cm C) 6 cm D) 8 cm — 37.

38. If $51 + 52 + \ldots + 100 = 3775$, then $101 + 102 + \ldots + 150 =$
A) 8775 B) 7550 C) 6275 D) 3825 — 38.

39. The sum of 1999 positive whole numbers is 2002. What is the least possible number of 1s that can be used as addends in this sum?
A) 1995 B) 1996 C) 1997 D) 1998 — 39.

40. What is the name of the only regular polygon which has as many diagonals as it has sides?
A) square B) pentagon C) hexagon D) octagon — 40.

The end of the contest 6