For all questions, answer choice (E) NOTA means that none of the given answers is correct. Good Luck!

1. What is $\frac{(4+7*11)^2}{9}$?
   (A) 196840.6 (B) 1626.8 (C) 94.6 (D) 729.0 (E) NOTA

2. Karthik makes the best hexagonal pizzas. He makes one of his pizzas equiangular, indicating that all angles in his pizza have the same measure. Is this pizza also regular (i.e having the same side lengths on each side of the pizza)?
   (A) Yes, it must be regular. (B) No, it cannot be regular. (C) It may be regular.
   (D) Need more information (E) NOTA

3. If 20% of a number is 25, then what is 16% of that number?
   (A) 16 (B) 18 (C) 20 (D) 22.5 (E) NOTA

4. If Sid is driving at 80 miles per hour, how long will it take for him to travel 280 miles? Assuming they are travelling at a consistent speed.
   (A) 1.5 hours (B) 2 hours (C) 3 hours (D) 4 hours (E) NOTA

5. If a@b is $\frac{4a+8b}{5a-2b}$, then what is 4@9?
   (A) 8.0 (B) 4.9 (C) 16.0 (D) 44.0 (E) NOTA

6. The sum of four consecutive numbers is 78. What is the sum of the second and third greatest of the 4 consecutive integers?
   (A) 37 (B) 38 (C) 39 (D) 41 (E) NOTA

7. Karthik decides to make one of his pizzas to share with two of his friends. After making the pizza, Karthik was very hungry and ate half of the pizza. His other friend then ate $\frac{2}{5}$ of what was remaining. What portion of the pizza was left for the last person to eat?
   (A) $\frac{3}{10}$ (B) $\frac{4}{5}$ (C) $\frac{3}{5}$ (D) $\frac{1}{10}$ (E) NOTA

8. If 4! is equivalent to $4*3*2*1$, what is the value of $\frac{5!}{3!}+\frac{6!}{5!}$?
   (A) 36 (B) 26 (C) 52 (D) 180 (E) NOTA

9. Karthik decides to cut a traditional circular pizza into 10 equal slices with each cut going through the center of the pizza. What is the central angle measure of one pizza slice?
   (A) 18° (B) 30° (C) 45° (D) 15° (E) NOTA

10. If the area of a circle is $49\pi\ mm^2$. What is the diameter of this circle?
    (A) 14 mm (B) 21 mm (C) 7 mm (D) 25 mm (E) NOTA

11. If the perimeter of a rectangle is 80 and the length is seven times the width, what is two times the area of the rectangle?
    (A) 98 (B) 280 (C) 350 (D) 560 (E) NOTA

12. Solve for y, given $7x+21=42$, and $4x+2y=18$.
    (A) -3 (B) 3 (C) -7 (D) 7 (E) NOTA

13. What is the greatest common factor of 32, 48, and 96?
(A) 16 (B) 4 (C) 32 (D) 8 (E) NOTA

14. Find the next term in the following arithmetic sequence: 3, 7, 11, 15, 19, 23...
(A) 25 (B) 26 (C) 28 (D) 27 (E) NOTA

15. Giovanni loves the movies. He decided to go see Cars 3 with 2 of his friends. Tickets costs $\$\frac{225}{60}$. How much did Giovanni and his two friends pay altogether (excluding tax) for their movie tickets in cents?
(A) 1125 (B) 11.25 (C) 375 (D) 3.75 (E) NOTA

16. What is the square root of $(11^2 - (4 * 5) - 1)$?
(A) 11 (B) 121 (C) 100 (D) 10 (E) NOTA

17. What is 50% of 90% of 900?
(A) 400 (B) 45 (C) 450 (D) 81 (E) NOTA

18. What is $\frac{7}{5} - \frac{1}{8}$?
(A) $\frac{3}{20}$ (B) $\frac{51}{40}$ (C) -2 (D) $-\frac{3}{20}$ (E) NOTA

19. In a cookie jar, there are sugar, chocolate chip, and raisin cookies in a ratio of 2:7:1 numbers of cookies respectively. Given that there are 50 cookies in the jar total and all cookies are either sugar, chocolate chip, or raisin flavored, how many chocolate chip cookies are in the jar?
(A) 7 (B) 35 (C) 10 (D) 5 (E) NOTA

20. Charitha wants to buy her newborn alpaca a new toy. The toy is priced at \$50, but it was then put at 20% off. If there is an 8% sales tax on the discounted price, how much does the toy cost in dollars?
(A) \$43.20 (B) \$38.00 (C) \$62.35 (D) \$47.80 (E) NOTA

21. What is 3^6?
(A) 216 (B) 729 (C) 54 (D) 18 (E) NOTA

22. RJ spends 2 hours and 40 minutes a day studying for quizzes. If he only studies on weekdays, then how many hours does he spend studying in 3 weeks?
(A) 50 hours (B) 45 hours (C) 38.5 hours (D) 8 hours (E) NOTA

23. What is the positive difference between the range and the median of the following set: {5, 12, 14, 7, 9, 8, 7, 0, 17, 19, 11}?
(A) 11 (B) 3 (C) 10 (D) 2 (E) NOTA

24. It takes Karthik exactly three hours and 50 minutes to make each pizza. If he worked for 20 hours continuously, how many whole pizzas did he make?
(A) 4.8 (B) 4 (C) 5.2 (D) 5 (E) NOTA

25. Charitha is teaching her new alpaca about prime numbers. Charitha asks, "What is the third prime number times the sixth prime number?" What is the answer to Charitha's question?
(A) 33 (B) 18 (C) 39 (D) 60 (E) NOTA

26. Sid gets pulled over for speeding and must pay \$59.64. Given that Sid only has quarters, nickels, and pennies and has an unlimited supply of each type of coin, what is the minimum number of coins he must give to deputy Joel John?
(A) 226 (B) 244 (C) 342 (D) 596 (E) NOTA

27. Shreya loves cheese and so she decides to make grilled cheese sandwiches. In each grilled cheese sandwich she puts 2 slices of tomatoes, 2 slices of bread, 4 slices of cheese, and 3 slices of lettuce. She has 56 slices of cheese but an unlimited amount of tomato slices, bread, and lettuce. How many slices of lettuce will she use if she will make enough sandwiches to use all of her cheese slices?
(A) 14 (B) 40 (C) 41 (D) 42 (E) NOTA

28. Sharry's friend, Shreya, also loves ice cream. If Sharry has 4 different ice-cream toppings, 2 different ice-cream cones, and 3 different ice-cream flavors, how many different types of ice-cream can Sharry share for Shreya given that each ice-cream type consists of 1 topping, 1 cone, and 1 flavor?
(A) 30 (B) 24 (C) 12 (D) 6 (E) NOTA

29. Macauley wants to be a famous Youtuber, but he needs a good camera. The store clerk tells him that if he answers his question correctly, he will give him the best camera ever. The store clerk asks Macauley how many megabytes are in 5.758 terabytes. Given that Macauley answers correctly, what was his answer? (Hint: 1 megabyte = 0.001 gigabytes and 1000 gigabytes = 1 terabyte)
(A) 5.758×10^9 (B) 5.758×10^6 (C) 5.758 (D) 5.758×10^{-3} (E) NOTA

30. Priscella visits the pet store in search of the perfect pet. At this store all alpacas, cats, and dogs have 4 legs and all birds have 2 legs. If there are 5 dogs, 1 dozen cats, half a dozen alpacas, and a score of birds, how many legs are in the store? (There are no other animals present and humans are excluded from the count).
(A) 132 (B) 120 (C) 112 (D) 94 (E) NOTA