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

1. Suppose a and b are two distinct variables with integer values. If a is the first composite number and b is the third prime number, what is $a + b$?
(A) 6 (B) 9 (C) 8 (D) 10 (E) NOTA

2. I have a tortilla chip that is in the shape of a perfect right triangle. If the length of the hypotenuse is 5 centimeters and the length of one of the legs is 3 centimeters, then what is the area of the tortilla chip, in centimeters squared?
(A) 6 (B) 7.5 (C) 10 (D) 15 (E) NOTA

3. What is $(2 + 3 \times 4)^2 \div 4$?
(A) 24.5 (B) 49 (C) 72 (D) 84 (E) NOTA

4. Focus Blast is an attack that you can use in Pokemon. If the probability of missing that attack is 0.30, and you use it 20 times, then how many times can you expect Focus Blast to hit the opponent?
(A) 6 (B) 8 (C) 12 (D) 14 (E) NOTA

5. A certain circle has a chord with a length of 4. If the diameter of this circle is 4 times the length of that chord, then what is the area of the circle?
(A) 8π (B) 16π (C) 36π (D) 64π (E) NOTA

6. What is the circumference of the circle in the previous question?
(A) 8π (B) 16π (C) 36π (D) 64π (E) NOTA

7. If the sum of two distinct numbers is 12 and their product is 20, then what are the two numbers?
(A) 1, 12 (B) 3, 4 (C) 2, 10 (D) 4, 5 (E) NOTA

8. Ms. Pickett teaches 6 classes a day with 30 kids in each class. If no student has her more than once a day, then how many students does Ms. Pickett teach?
(A) 120 (B) 150 (C) 180 (D) 210 (E) NOTA

9. Bob has \$4.25 in just quarters and nickels. If \$2.00 of that amount is in quarters, how many nickels does Bob have?
(A) 40 (B) 45 (C) 50 (D) 55 (E) NOTA

10. Kyle is addicted to League of Legends. If he spends 3 hours and 20 minutes every day playing League of Legends, then how many hours does Kyle spend playing League of Legends in two weeks?
(A) 3 hours 20 minutes (B) 23 hours 40 minutes (C) 23 hours 20 minutes
(D) 46 hours 40 minutes (E) NOTA

11. Let a regular pentagon with a side length of 4 share a side with a square. What is the perimeter of the figure described?
(A) 12 (B) 16 (C) 20 (D) 24 (E) NOTA

12. What is the mean of the following data set: {8, 3, 1, 5, 9, 23, 15, 9, 10, and 7}?
(A) 9 (B) 10 (C) 11 (D) 12 (E) NOTA

13. Suppose x is the range and y is the median of the following data set: {8, 3, 1, 5, 9, 23, 15, 9, 10, and 7}. What is the positive difference between x and y?
(A) 12 (B) 12.5 (C) 13 (D) 13.5 (E) NOTA

14. A game that generally costs \$40 is on sale for 20% off. If there is an 8% sales tax on the discounted price, how much does the game cost in dollars?
(A) \$34.48 (B) \$34.56 (C) \$34.72 (D) \$34.88 (E) NOTA

15. A rocket flies up to the sky at 8 miles per hour. If the rocket flies for 7 hours and 30 minutes, how many miles did the rocket travel in that time?
(A) 52 (B) 56 (C) 60 (D) 64 (E) NOTA

16. A circle with radius 2 is inside a square with side length of 4. What is the area outside of the circle, but inside of the square?
(A) $16 - 4\pi$ (B) $16 - 8\pi$ (C) $8 - 4\pi$ (D) $8 - 2\pi$ (E) NOTA

17. A bag has 54 marbles. There are red, blue, and green marbles with a ratio of 2:4:3 respectively. How many blue marbles are in the bag?
(A) 24 (B) 28 (C) 32 (D) 36 (E) NOTA

18. The decimal 1.45 can be expressed as an improper fraction in the form $\frac{a}{b}$ such that a and b are relatively prime, and as a mixed number in the form $c\,\frac{d}{e}$ such that d and e are relatively prime. What is the sum of $a+b+c+d+e$?
(A) 53 (B) 79 (C) 113 (D) 247 (E) NOTA

19. Azhar is going to paint his house which is in the shape of a cube with a length of 6 meters. If it takes him 1 hour to paint $12,000\ \text{cm}^2$, how many hours does it take him to paint the inside of his house, including the ceiling and the floor?
(A) 240 (B) 300 (C) 360 (D) 420 (E) NOTA

20. What is $\frac{8}{3} - \frac{12}{5}$?
(A) $\frac{2}{3}$ (B) $\frac{1}{3}$ (C) $\frac{1}{2}$ (D) $\frac{1}{4}$ (E) NOTA

21. Teja and Shivam are having a jumping competition. Teja jumps first and gets 1 foot off the ground. Shivam jumps and goes 20% higher than Teja's jump. Teja then jumps 30% higher than that to win the competition. How many inches off the ground did Teja jump on his second attempt? Round your answer to the nearest inch.
(A) 16 (B) 17 (C) 18 (D) 19 (E) NOTA

22. Jasmine has an addiction for pineapples. One pineapple costs \$4.25 and Jasmine makes \$10 a day at her job. If Jasmine wants to buy 25 pineapples, how many days does Jasmine have to work to have enough money to purchase these pineapples?
(A) 9 (B) 10 (C) 11 (D) 12 (E) NOTA

23. What does the following expression equal: $6 + 3(78 - 2(2 + 4)^2)$?
(A) 18 (B) 24 (C) 30 (D) 36 (E) NOTA

24. If 2 apples and 4 kiwis cost \$8.00 and 1 apple and 3 kiwis cost \$5.00, then how much money is required to purchase 8 apples and 10 kiwis?
(A) \$26.00 (B) \$28.00 (C) \$30.00 (D) \$32.00 (E) NOTA

25. A pizza pie is cut into 12 equal pieces. What is the central angle measure of one pizza slice?
(A) 15° (B) 30° (C) 45° (D) 90° (E) NOTA

26. If 5! is equivalent to $5 \times 4 \times 3 \times 2 \times 1$, what is the value of $2! + \frac{5!}{4!}$?
(A) 2 (B) 3 (C) 6 (D) 7 (E) NOTA

27. Puneet has the largest turban in the world. His turban, when unraveled, is in the shape of a rectangle with dimensions of 20 by 35. What is the sum of the area and perimeter of his turban? Disregard units in your answer.
(A) 780 (B) 790 (C) 800 (D) 810 (E) NOTA

28. Kyle believes that he can bench press a larger weight than Meit and challenges him to a competition. Meit accepts his challenge and benches 150 pounds. Kyle manages to bench a whopping 225 pounds. How much more can Kyle bench than Meit, as a percent?
(A) 25% (B) 50% (C) 125% (D) 150% (E) NOTA

29. It takes Cletus 2 hours to run 30 miles, Homer 3 hours to run 40 miles, and Bart 4 hours to run 50 miles. Assuming that they all ran at their fastest possible speed the entire, who is the fastest runner?
(A) Cletus (B) Homer (C) Bart (D) Cannot be determined (E) NOTA

30. I have a slice of pizza that's a triangle. Two of its sides have the same length, and the third side is a different length. What type of triangle is it?
(A) Equilateral (B) Scalene (C) Isosceles (D) Tetrahedal (E) NOTA