

Select (E) NOTA if none of the above answers are correct. Good luck!

- Three soup cans weigh 14.22 grams, 15.64 grams, and 17.53 grams. What is the combined weight of all three cans, in grams?
(A) 24.39 (B) 37.49 (C) 46.38 (D) 47.39 (E) NOTA
- Evaluate $\frac{8}{4} + 2 \times 12 - 3$.
(A) 20 (B) 23 (C) 36 (D) 45 (E) NOTA
- Daniel, the unsuccessful salesman, has 200 cars that he needs to sell. Out of those 200 cars, 60 have defects and cannot be sold. What is the fraction, in simplest form, of cars that cannot be sold? Only cars with defects cannot be sold.
(A) $\frac{1}{4}$ (B) $\frac{3}{10}$ (C) $\frac{3}{5}$ (D) $\frac{3}{4}$ (E) NOTA
- How many sides does a quadrilateral have?
(A) 2 (B) 3 (C) 4 (D) 5 (E) NOTA
- Eli the genius caveman walks to school every day using a strange route. He walks 250 feet north, 70 feet east, and stops to eat breakfast. Then he walks 30 feet west, and finally 40 feet north. How far, north and east, in feet, is Eli from where he started?
(A) 250 feet north, 40 feet east (B) 250 feet north, 70 feet east (C) 290 feet north, 40 feet east
(D) 290 feet north, 70 feet east (E) NOTA
- How many inches are in 4 yards?
(A) 12 (B) 36 (C) 144 (D) 256 (E) NOTA
- Evaluate 4.6×2.2 .
(A) 9.46 (B) 10.12 (C) 14.08 (D) 101.2 (E) NOTA
- The operator ! defined as $n! = n(n-1)(n-2) \cdots (2)(1)$. For example, $3! = 3 \times 2 \times 1 = 6$. Evaluate $3! + 5!$
(A) 15 (B) 120 (C) 126 (D) 720 (E) NOTA
- What is the least common multiple of the numbers 2, 7, and 8?
(A) 1 (B) 14 (C) 16 (D) 112 (E) NOTA
- Ian is a student in Mrs. Funk's class. He isn't the brightest guy, but he noticed that there is a pattern to this set of numbers: 1, 4, 9, 16, 25, 36, __, 64. What number should Ian put in the blank to maintain the pattern?
(A) 46 (B) 47 (C) 49 (D) 56 (E) NOTA
- Annie absolutely loves terminating decimals – that is, numbers that when expressed as a decimal eventually end. For example, $\frac{53}{100} = .53$ is a terminating decimal. Which of the following fractions results in a terminating decimal?
(A) $\frac{1}{3}$ (B) $\frac{17}{6}$ (C) $\frac{16}{3}$ (D) $\frac{15}{2}$ (E) NOTA
- Super Sid rides a motorcycle to his mom's house at the constant rate of 70 miles per hour. He gets to his destination in 3.5 hours. How many miles did Super Sid travel (Hint: distance = rate \times time)?
(A) 210 (B) 100 (C) 245 (D) 275 (E) NOTA

13. Evaluate the expression $3z^2 + 4x - 7$ where $x = 2$ and $z = 5$.
(A) 25 (B) 31 (C) 76 (D) 113 (E) NOTA
14. Simplify the fraction: $\frac{\left(\frac{2}{3}\right)}{\left(\frac{1}{8}\right)}$
(A) $\frac{1}{12}$ (B) $\frac{1}{11}$ (C) $\frac{8}{3}$ (D) $\frac{16}{3}$ (E) NOTA
15. What is the range for the following data set: {13, 15, 19, 15, 24, 13, 17, 20, 9, 16} (Hint: The range is the largest element minus the smallest element)?
(A) 13 (B) 15 (C) 16.1 (D) 24 (E) NOTA
16. What is the sum of the average and the mode for the following data set: {8, 4, 2, 13, 7, 5, 12, 4, 3, 9} ?
(A) 10.7 (B) 6.5 (C) 4 (D) 2.7 (E) NOTA
17. MMCDXXIII is the Roman numeral form of what number?
(A) 2,600,023 (B) 1,453 (C) 2,650 (D) 2,423 (E) NOTA
18. What is the circumference of the circle with a radius of 4? Use the approximation $\pi \approx 3$.
(A) 4 (B) 8 (C) 12 (D) 24 (E) NOTA
19. What is the ordered pair of the point on the line $y = \frac{4}{3}x + 8$ when $x = 6$?
(A) 16 (B) (6, 16) (C) (16, 6) (D) (6, 18.6) (E) NOTA
20. Les is carrying a portable fish aquarium in the shape of a box. If the length of the aquarium is 11 inches, the width is 7 inches, and the height is 5 inches, how much water (in cubic inches) is needed to fill the aquarium to the top?
(A) 23 (B) 77 (C) 355 (D) 385 (E) NOTA
21. What is the probability of rolling an even number on a six-sided fair die, numbered 1 through 6?
(A) $\frac{1}{6}$ (B) $\frac{1}{3}$ (C) $\frac{1}{2}$ (D) $\frac{2}{3}$ (E) NOTA
22. Bill eats at the Happy Math Cafe for breakfast, lunch, and dinner. For breakfast, he can choose one of the following 3 items: bagels, doughnuts, or pancakes. For lunch, he can choose one of the following 4 items: sandwich, sub, salad, or soup. For dinner, he can choose one of the following 5 items: pasta, rice, steak, burgers, and vegetables. If Bill chooses one item each for breakfast, lunch, and dinner, how many different ways can he choose these meals?
(A) 12 (B) 30 (C) 60 (D) 144 (E) NOTA
23. Linus loves blankets. Let x represents the number of blankets Linus buys. If each blanket costs \$4, and Linus pays a 20% tip on each blanket, which expression shows how much money Linus will spend in total?
(A) $4x + 0.2x$ (B) $4.8x$ (C) $4x + 0.2(4x)$ (D) $0.2(4x)$ (E) NOTA
24. Find the value of x in the equation $-22x = 88$.
(A) -4 (B) -3 (C) 3 (D) 4 (E) NOTA

25. You and 2 friends hit a total of 250 baseballs. If you hit 30% of the baseballs, how many baseballs did you hit?
(A) 30 (B) 65 (C) 75 (D) 120 (E) NOTA
26. Which of the following is equivalent to $g \times g \times g$?
(A) $g + 13$ (B) $g \times 13$ (C) $\frac{1}{13g}$ (D) g^{13} (E) NOTA
27. In a large bowl, there are 200 pieces of candy. Of the candy, 60 pieces are lollipops and the rest are gumballs. What fraction of the candy is made up of gumballs?
(A) $\frac{3}{10}$ (B) $\frac{3}{7}$ (C) $\frac{7}{10}$ (D) $\frac{7}{3}$ (E) NOTA
28. In the equation $y = 3x + 4$, if $y = 13$, what is the value of x ?
(A) 3 (B) $\frac{17}{3}$ (C) 13 (D) 43 (E) NOTA
29. What is 42% expressed as a decimal?
(A) 0.0402 (B) 0.402 (C) 4.2 (D) 42.00 (E) NOTA
30. During Thanksgiving break, Payal and Tarun go rock climbing. Payal climbed a distance of 300 feet, but Tarun was lazy and only climbed a distance of 225 feet. What fraction of Payal's distance did Tarun climb?
(A) $\frac{1}{4}$ (B) $\frac{3}{10}$ (C) $\frac{3}{4}$ (D) $\frac{5}{6}$ (E) NOTA