

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

1. If the perimeter of a given square is $4m$, then what is the area of the same square?
(A) $4m^2$ (B) $1m^2$ (C) $2m^2$ (D) $16m^2$ (E) NOTA
2. What is $2 \times 2 \times 2 \times 2$?
(A) 8 (B) 16 (C) 32 (D) 64 (E) NOTA
3. If the circumference of a given circle is 8π , then what is the radius of the same circle? (Disregard all units)
(A) 1 (B) 2 (C) 4 (D) 8 (E) NOTA
4. If two angles of a triangle are known to be 34° and 42° , what is the third angle? (Answers are in degrees)
(A) 14 (B) 28 (C) 100 (D) 104 (E) NOTA
5. If Johnny has 3 pairs of socks, 2 shirts, and 4 hats, how many distinct outfit combinations can he make if he can only wear one pair of socks, one shirt, and one hat at a given point of time.
(A) 9 (B) 12 (C) 20 (D) 24 (E) NOTA
6. Evaluate the following: $(2 + (4(2 - 3)) - 1)^3 + 1$
(A) -26 (B) -27 (C) 26 (D) 27 (E) NOTA
7. Aditya and Kyle are trying to dock a huge boat in their private lake. If the boat is in the shape of a rectangle with a length of 24 and a width of 37, then what is the perimeter of the boat?
(A) 24 (B) 37 (C) 61 (D) 122 (E) NOTA
8. What is the area of the same boat described in the previous question?
(A) 122 (B) 61 (C) 888 (D) 444 (E) NOTA
9. Everybody knows that the shape of a samosa is a triangle. If a certain samosa has a base length of 10 and a height of 5, then what is the area of the samosa?
(A) 50 (B) 25 (C) 20 (D) 15 (E) NOTA
10. How much money would I save if I were to purchase a \$20 shirt, took 5% off to get a new price, then took 5% off the new price instead of buying the same shirt at 10% off? Disregard the sales tax.
(A) \$0.05 (B) \$0.10 (C) \$0.15 (D) No Difference (E) NOTA
11. If 16 apples weigh the same as 40 bananas, 5 bananas weigh the same as 2 peaches, and 3 peaches weigh 6 grams, then what is the weight of 1 apple in grams?
(A) .8 (B) 1 (C) 1.6 (D) 2 (E) NOTA
12. If it takes Bob 3 hours to mow his lawn, then how many minutes would it take for him to mow his neighbor's lawn if it is exactly three times bigger than his own and his pace does not slow down over time?
(A) 9 (B) 180 (C) 270 (D) 540 (E) NOTA

13. I have a backyard in the shape of a rectangle with dimensions of $18ft \times 14ft$. I want to put fertilizer on the grass in a way that the entire backyard is covered with the fertilizer. If each bag of fertilizer can cover $7in^2$ and each bag costs \$3, how much would it cost to completely cover my backyard?
- (A) 36 (B) 72 (C) 108 (D) 144 (E) NOTA
14. A Pok Ball is in the shape of sphere. If a given Pok Ball has a radius of 4 meters, then what is the volume of the sphere? Hint: Volume of a sphere is equal to $\frac{4\pi r^3}{3}$
- (A) $\frac{64\pi}{3}$ (B) $\frac{256\pi}{3}$ (C) $\frac{16\pi}{3}$ (D) $\frac{144\pi}{3}$ (E) NOTA
15. Shardul wants to buy a razor but realizes that it costs \$50 more than he has. Luckily, he has a job that pays \$2.50 a day. How many days until he can afford the razor?
- (A) 10 (B) 15 (C) 20 (D) 25 (E) NOTA
16. If I have 15 rows of cabbages in my backyard and each row contains 15 cabbages, then how many cabbages are in 8 rows?
- (A) 120 (B) 150 (C) 180 (D) 225 (E) NOTA
17. If I have 200 feet of fencing and I want to make a fence around my house. What is the area of the largest square I can make out of this much fencing?
- (A) 200 (B) 2500 (C) 5000 (D) 10000 (E) NOTA
18. Ash Ketchup, Block, Bay, and Axe are walking on a path but find themselves blocked by the legendary monster S'moreslax. The monster S'moreslax agrees to move out of the way if the group can find the value of x from the following equation: $2x + 4 = 8$. Help the group find the correct value of x .
- (A) 0 (B) 1 (C) 2 (D) 3 (E) NOTA
19. There are 7 blue marbles, 3 red marbles, 5 black marbles, and 37 orange marbles in one bag. If I were to pick one marble randomly from the bag, what is the probability that color of the marble that I pick starts with the letter b?
- (A) $\frac{3}{13}$ (B) $\frac{5}{26}$ (C) $\frac{2}{13}$ (D) $\frac{10}{13}$ (E) NOTA
20. Bob has a bad habit of throwing Skittles in a trash can. Since his aim is not very good, he misses 70% of his throws. If Bob were to throw 1500 Skittles in one day, how many will he successfully throw in the trash can? Round your answer to the nearest integer.
- (A) 700 (B) 1000 (C) 1050 (D) 1200 (E) NOTA
21. I have a huge bag of M&Ms that I got for my birthday. If I were to eat 40 M&Ms, and give $\frac{1}{3}$ of the remaining M&Ms to Azhar, I would end up with 600 M&Ms. How many M&Ms were there in the bag before any were eaten or given away?
- (A) 910 (B) 920 (C) 930 (D) 940 (E) NOTA
22. What decimal is equivalent to $\frac{5}{20}$?
- (A) 0.2 (B) 0.55 (C) 0.25 (D) 0.35 (E) NOTA

23. Three friends baked a cake to share amongst themselves. One of the three friends eats half the cake and another eats a third of the cake. How much of the cake does the last person eat?
- (A) $\frac{1}{3}$ (B) $\frac{1}{2}$ (C) $\frac{1}{6}$ (D) $\frac{2}{3}$ (E) NOTA
24. If $a\phi b = \frac{7b - 3a}{2}$, then what is $4\phi 6$?
- (A) 5 (B) 8 (C) 12 (D) 15 (E) NOTA
25. If the area of a certain circle is $36\pi m^2$, then what is the diameter of the same circle? (Answers are in meters)
- (A) 3 (B) 6 (C) 9 (D) 12 (E) NOTA
26. The sum of four consecutive integers is 26. What is the sum of the first and the last of the four consecutive integers?
- (A) 5 (B) 7 (C) 12 (D) 13 (E) NOTA
27. If it takes me 30 minutes to complete a level in my video game, then how many hours would it take me to finish the game if the game has 30 levels that each take the same amount of time to complete?
- (A) 15 (B) 30 (C) 300 (D) 900 (E) NOTA
28. If Jack was to roll a fair die, what is the probability that the side that he rolls has a prime number of pips? (pips are the dots on each side of the die)
- (A) $\frac{1}{6}$ (B) $\frac{1}{3}$ (C) $\frac{1}{2}$ (D) $\frac{2}{3}$ (E) NOTA
29. If 40% of X is 16, then what is 60% of X?
- (A) 40 (B) 16 (C) 20 (D) 24 (E) NOTA
30. What is $9+10$?
- (A) 20 (B) 21 (C) 22 (D) 23 (E) NOTA