

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

1. Drycleaning one jacket costs \$7.57. How much money does it cost to dryclean 3 jackets (without any tax)?  
(A) \$28.33                      (B) \$26.41                      (C) \$22.71                      (D) \$21.21                      (E) NOTA
2. Tarun has been making sandwiches for the past 2 hours. But Tarun was actually trying only 40% of that time. How much time did Tarun spend actually trying to make sandwiches, in minutes?  
(A) 48                              (B) 40                              (C) 30                              (D) 0.8                              (E) NOTA
3. Reduce the fraction  $\frac{39}{65}$ .  
(A)  $\frac{1}{3}$                               (B)  $\frac{3}{5}$                               (C)  $\frac{2}{5}$                               (D)  $\frac{7}{10}$                               (E) NOTA
4. A square with equal sides has the side length  $x$  and area 36. What is  $x$ ?  
(A) 6                                (B) 4                                (C) 8                                (D) 16                                (E) NOTA
5. Find the value of  $5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 + 5 + 5$ .  
(A) 35                              (B) 40                              (C) 45                              (D) 50                              (E) NOTA
6. A certain set contains 7 consecutive odd numbers. If the median of the set is 11, what is the range?  
(A) 11                              (B) 12                              (C) 15                              (D) 17                              (E) NOTA
7. How many centimeters are in 28.1 meters?  
(A) 2.81                            (B) 28.1                            (C) 281                            (D) 2810                            (E) NOTA
8. Jarrod is taking a trip to his secret hideout. He has to row a boat across a lake and then walk a certain distance to get there. Jarrod rowed his boat 15 minutes longer than the time he spent walking. If he spent 35 minutes total for his trip, for how many minutes did he walk?  
(A) 10                              (B) 15                              (C) 20                              (D) 25                              (E) NOTA
9. The English soccer club Nottingham Forest F.C. has played in 20 European Cup games. In those games, they have won 12, drawn 4, and lost 4. What percentage of the European Cup games did Nottingham Forest F.C. win?  
(A) 20%                            (B) 16%                            (C) 60%                            (D) 18%                            (E) NOTA
10. Evaluate  $537 + 121 + 658$ .  
(A) 1216                            (B) 1306                            (C) 2316                            (D) 1316                            (E) NOTA
11. Captain America was traveling at a constant 45 miles per hour (mph). How many miles did he travel if he traveled for only 40 minutes?  
(A) 10                              (B) 15                              (C) 20                              (D) 25                              (E) NOTA
12. If the number of sides of a pentagon is  $P$  and the number of sides of a square is  $S$ , find the value of  $S + P$ .  
(A) 4                                (B) 5                                (C) 9                                (D) 10                                (E) NOTA

13. In the 2010-2011 season of the Spanish professional handball league Liga ASOBAL, the team Barcelona Borges scored 1003 goals and gave up 747 goals. If the Goal Differential can be found by subtracting the goals scored by the goals given up, find the Goal Differential of the team Barcelona Borges.
- (A) 156                      (B) 246                      (C) 256                      (D) -30                      (E) NOTA

14. Evaluate  $73 \times 57$ .
- (A) 4161                      (B) 4151                      (C) 3701                      (D) 3711                      (E) NOTA

Payal is using a Stem and Leaf plot for a set of numbers.

Use the Stem and Leaf plot for Question 15 and 16.

Stem	Leaf
3	1 1 3 7 8
4	0 4 4 4
5	5 6
6	3 4 5 6

15. What is the value of the mode minus the range for this set of numbers?
- (A) 9                      (B) -9                      (C) 35                      (D) 44                      (E) NOTA

16. What is the probability that Payal will choose a number higher than 55 when she chooses one number from the set?
- (A)  $\frac{1}{5}$                       (B)  $\frac{4}{15}$                       (C)  $\frac{1}{3}$                       (D)  $\frac{6}{15}$                       (E) NOTA

17. What is the value of  $x$  if  $4x + 5 = 29$ ?
- (A) 4                      (B) 6                      (C)  $\frac{13}{3}$                       (D)  $\frac{15}{2}$                       (E) NOTA

18. Simplify the expression  $7 \times x \times x \times x \times 2 \times y \times y$
- (A)  $10x + 4y$                       (B)  $14x^2y^3$                       (C)  $7x^3y^2$                       (D)  $14x^3y^2$                       (E) NOTA

19. One angle of a scalene triangle is  $37^\circ$ . What is the sum of the other 2 angles? (*Note: The angles of a scalene triangle sum to 180 degrees*)
- (A) 53                      (B) 90                      (C) 120                      (D) 143                      (E) NOTA

20. Eli is a college kid and likes to save money. He plans to buy a \$230 lollipop with a discount coupon of 60% off. How much money will Eli *save* using the discount coupon compared to the full price of \$230?
- (A) \$60                      (B) \$92                      (C) \$200                      (D) \$138                      (E) NOTA

21. Annie loves postcards. She has 100 blank postcards to begin with. She gives 28% of them to her friends. Then she colors 25% of the remaining postcards blue and then lets her goat Charles eat the blue postcards. How many postcards does Annie have left?
- (A) 18                      (B) 44                      (C) 54                      (D) 72                      (E) NOTA

22. Evaluate  $\frac{3}{15} - \frac{1}{3} + \frac{7}{10}$
- (A)  $\frac{9}{22}$                       (B)  $\frac{17}{30}$                       (C)  $\frac{27}{30}$                       (D)  $\frac{185}{150}$                       (E) NOTA

23. Find for the missing number  $x$  in the pattern: 1, 2, 4, 7,  $x$ , 16, 22.  
(A) 11 (B) 12 (C) 13 (D) 14 (E) NOTA
24. If  $A = 1, B = 2, C = 3$ , then find  $2A + 3B + 4C$ .  
(A) 14 (B) 16 (C) 18 (D) 20 (E) NOTA
25. Diego has a perfect cube of cheese with the volume  $27 \text{ in}^3$ . If Diego reduces the length, width, and height by 1 in, what is the volume of the new cube of cheese in  $\text{in}^3$ ?  
(A) 6 (B) 9 (C) 16 (D) 24 (E) NOTA
26. Which of the following is equivalent to  $x \times x^3(x^4)$ ?  
(A)  $x + x^7$  (B)  $x^8$  (C)  $x^{13}$  (D)  $x + x^{12}$  (E) NOTA
27. Daniel accidentally wakes up at 3:30 am. If his alarm is set for 9:00 am, how long is Daniel awake when his alarm goes off?  
(A)  $5\frac{1}{2}$  minutes (B) 300 minutes (C) 330 minutes (D) 19800 minutes (E) NOTA
28. Simplify the fraction:  $\frac{1}{8} \times \frac{4}{3} \times \frac{12}{7}$   
(A)  $\frac{6}{7}$  (B)  $\frac{2}{7}$  (C)  $\frac{9}{56}$  (D)  $\frac{12}{7}$  (E) NOTA
29. Using the equation  $y = 4x + 3$ , if  $y = 11$ , what is the value of  $x$ ?  
(A) 2 (B) 3 (C) 11 (D) 16 (E) NOTA
30. Pamela has 10 coins in U.S. change, and she has *at least* 1 quarter, 1 nickel, 1 dime, and 1 penny. Which of the following cannot be the amount of money Pamela has?  
(A) \$0.47 (B) \$1.17 (C) \$1.18 (D) \$1.19 (E) NOTA