

The choice E. NOTA means that none of the other answers are correct. Good luck!

1. The area of a triangle is  $\frac{\text{base} \times \text{height}}{2}$ . What is the area of a triangle with base 4 and height 6?

- A. 5                      B. 12                      C. 18                      D. 24                      E. NOTA

2. Pratik goes to the store to buy some spices for his world-famous Indian cuisine. After shopping, his total comes to \$13.37. All he has in his wallet is a \$50 bill, so he pays with it. How much change should he receive?

- A. \$35.63                      B. \$36.63                      C. \$36.73                      D. \$37.73                      E. NOTA

**For questions 3-5, consider the following scenario:**

Eli wants to see how many slices of pizza he usually eats, so he records the number of slices he eats at different times. After recording 7 trials of pizza eating, the numbers are as follows: 8, 11, 14, 7, 9, 10, 11.

3. What is the average number of slices eaten?

- A. 8                      B. 9                      C. 10                      D. 11                      E. NOTA

4. Let the range of the data be  $R$  and the mode be  $M$ . What is  $M - R$ ?

- A. 4                      B. 7                      C. 8                      D. 9                      E. NOTA

5. Take the median of the data, and subtract four. What is the name of the polygon with this many sides?

- A. Square                      B. Pentagon                      C. Hexagon                      D. Heptagon                      E. NOTA

6. Find the missing number in the following sequence: 57, 45, 33, ??, 9.

- A. 19                      B. 20                      C. 21                      D. 24                      E. NOTA

7. Patrick wants to count up how much spare change he has, so he empties his piggy bank. He finds 13 quarters, 24 dimes, 7 nickels, and 3 pennies. How much money does he have in total?

- A. \$5.18                      B. \$6.00                      C. \$6.03                      D. \$7.24                      E. NOTA

8. An adult takes about 180 breaths in 15 minutes. A baby takes about 300 breaths in 15 minutes. How many more breaths does a baby take in one hour than an adult?

- A. 120                      B. 480                      C. 1020                      D. 1200                      E. NOTA

9. Sarah is making a paper mobile in her arts and crafts class. She draws and cuts out a square with sides 4.5 inches long. Then, she draws a regular hexagon with the same perimeter as the square. How long is each side of the regular hexagon? (All sides are equal in length).

- A. 3 inches                      B. 6 inches                      C. 18 inches                      D. 27 inches                      E. NOTA

10. Bishoy, who loves to party, decides to throw a party which 12 people (Bishoy and 11 friends) attend. At the party, 4 people are wearing socks, 6 people are wearing shoes, and 3 people are wearing both. How many people at the party are wearing neither socks nor shoes?

- A. 5                      B. 6                      C. 7                      D. 8                      E. NOTA

11. The quotient of two numbers is 0. What is their product?

- A. 0                      B. 1                      C. 2009                      D. need more info                      E. NOTA

12. What is the perimeter of a rectangle with width 3.5 and length 4?

- A. 11.5                      B. 13                      C. 14                      D. 15                      E. NOTA

13. How many of the following statements are true?

- I. 2 and 9 are prime numbers.                      II. 15% of 200 is 30.                      III. 3 feet = 9 yards.

- A. 0                      B. 1                      C. 2                      D. 3                      E. NOTA

14.  $A$  = The number of sides of a decagon  
 $B$  = The number of faces of a cube  
 $C$  = The greatest common factor of 6 and 21

What is  $A + B - 2C$ ?

- A. 4                      B. 10                      C. 12                      D. 22                      E. NOTA

15. How many dimes are equal to one hundred pennies?

- A.  $\frac{1}{10}$                       B. 1                      C. 10                      D. 100                      E. NOTA

16. Evaluate:  $4.312431 - 3.755976$ .

- A. .554654                      B. .556455                      C. .645546                      D. .655545                      E. NOTA

17. In every tennis match, Patrick hits 90 percent of his first serves in. If he serves 50 times during a match, how many first serves does he **not** hit in?

- A. 5                      B. 10                      C. 15                      D. 45                      E. NOTA

18. Chris loves to swim. When using his flippers, he swims four times faster than he does without them. If he swims a lap in 20 seconds without his flippers, how many laps can he swim with them in 20 seconds?

- A. 4                      B. 5                      C. 20                      D. 80                      E. NOTA

19. A triangle has angles measuring  $45^\circ$ ,  $44^\circ$ , and  $91^\circ$ . What type of triangle is it?

- A. Acute                      B. Isosceles                      C. Obtuse                      D. Right                      E. NOTA

20. Since soccer is such a popular sport, 416 people try out for the soccer team at Rickards. The coach splits them up into groups of seven. How many players will be left over after the groups are made?
- A. 2                      B. 3                      C. 4                      D. 5                      E. NOTA
21. Lebron James is 6 feet 8 inches tall. His basketball rival Coleman Howard stands at 3 feet 10 inches. How much taller is Lebron James than Coleman Howard?
- A. 2 feet 10 inches    B. 3 feet 2 inches    C. 3 feet 10 inches    D. 4 feet 2 inches    E. NOTA
22. Which of the following numbers is divisible by 7?
- A. 972                      B. 1036                      C. 2563                      D. 3785                      E. NOTA
23. What is one third of one fourth of one sixth of 216?
- A. 3                      B. 4                      C. 5                      D. 6                      E. NOTA
24. One morning at 9:00, while Daniel was taking a nature walk through the forest, a cloud formed above and it started to pour. If the cloud will create 500,000 raindrops, and the rain falls at a constant rate of 1000 drops per minute, at what time will it stop raining?
- A. 3:20 P.M.              B. 4:20 P.M.              C. 4:40 P.M.              D. 5:20 P.M.              E. NOTA
25. Bishoy, a golf prodigy, claims to have already reached the level of Tiger Woods. He scores a birdie (one less than par) on each hole. If the par scores for each of the holes on a 9 hole course are 4, 3, 2, 3, 4, 5, 6, 4, and 5, what is Bishoy's total score for the 9 holes?
- A. 24                      B. 25                      C. 26                      D. 27                      E. NOTA
26. Hannah is stacking cans. She puts 10 cans on the bottom row, 9 cans on the next row, 8 on the next, and so on until she gets to the top row with only 1 can. How many cans are in her stack?
- A. 36                      B. 45                      C. 50                      D. 55                      E. NOTA
27. A farmer has to take pumpkins to the market, which is 45 minutes away. His truck can only hold a maximum of 8 pumpkins at a time. If he has 36 pumpkins, how long will it take him to take all of his pumpkins to the market and return home? (Ignore the time it takes to unload and reload pumpkins).
- A. 6 hours                      B. 6.75 hours                      C. 7.5 hours                      D. 8 hours                      E. NOTA
28. Using order of operations, evaluate  $(5 + 5) \div 5 + 3 - 4 \times 2$ .
- A. -3                      B. 0                      C. 1                      D. 2                      E. NOTA
29. A circle has radius 7 cm. Find the circumference of the circle, using  $\frac{22}{7}$  as an approximation for pi ( $\pi$ ).
- A. 14 cm                      B. 22 cm                      C. 44 cm                      D. 154 cm                      E. NOTA

TURN THIS PAGE OVER FOR QUESTION 30

30. Which of the following is an integer?

A. 0

B. 1.33

C.  $\frac{5}{2}$

D. 3.14

E. NOTA