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

1. Puneet has a very large closet that he has filled with a myriad of clothes. Every morning, before coming to school, Puneet can choose from 6 turbans, 5 pairs of pants, and 4 shirts. If his outfit consists of one turban, one pair of pants, and one shirt, how many total outfit combinations does Puneet have?

   (A) 15 (B) 120 (C) $\frac{10}{3}$ (D) 77 (E) NOTA

2. Evaluate $\frac{23!}{21!}$.

   (A) 2! (B) $\frac{23}{21}$ (C) Not enough information (D) 506 (E) NOTA

3. Evaluate 5-2.

   (A) 4 (B) 3 (C) 7 (D) -3 (E) NOTA

4. Complete the following sequence: $5, 15, 45, \_\_$

   (A) 135 (B) 90 (C) 15 (D) 120 (E) NOTA

5. Define the operation: $c\Omega d = 6c - d \times c$. What is $5\Omega 3$?

   (A) 75 (B) 15 (C) 45 (D) 3 (E) NOTA

6. Evaluate the area of a circle if its radius is 4 cm.

   (A) 8π (B) 4π (C) 12π (D) 16π (E) NOTA

7. Ian is currently 10 times as old as his son, Jack. 40 years later, Ian will be twice as old as his son. What is Jack's current age?

   (A) 40 (B) 70 (C) 50 (D) Need more information (E) NOTA

8. Duarte flips a standard, fair coin, where one side is heads the other is tails. If on the first flip Duarte gets heads and on the second flip Duarte gets heads, what is the probability that on the third flip Duarte gets tails?

   (A) 1 (B) 1/4 (C) 1/2 (D) 7/8 (E) NOTA

9. If $3x = 729$, what is x?

   (A) 243 (B) 253 (C) 1/243 (D) 6 (E) NOTA

10. Compute 671×589.

    (A) 395,219 (B) 300,000 (C) 6319 (D) 396,489 (E) NOTA

11. Thirty percent of a number is equal to sixty percent of 200. What is the number?

    (A) 100 (B) 300 (C) 400 (D) 600 (E) NOTA

12. The numerator of the fraction $\frac{x}{y}$ is 30 greater than the denominator. If $\frac{x}{y} = \frac{5}{2}$, what is $x + y$?

    (A) -70 (B) 10 (C) 70 (D) Not enough information (E) NOTA

13. Evaluate $\frac{1}{2} + \frac{1}{4} + \frac{1}{6} + \frac{1}{8}$.

    (A) $\frac{1}{14}$ (B) $\frac{1}{28}$ (C) $\frac{25}{24}$ (D) $\frac{13}{12}$ (E) NOTA

14. The median of seven consecutive integers is 10. What is the mean of the seven integers?
(A) 15 (B) 10 (C) Not enough information (D) $\frac{35}{4}$ (E) NOTA

15. Unlike Kyle and Aditya, Carson can get a girlfriend. Yesterday, he had 6 girls who were interested in him, today he has 12, tomorrow he will have 24. If this pattern continues, how many girls will be interested in Carson 3 days from today?
(A) 36 (B) 42 (C) 48 (D) 96 (E) NOTA

16. The amount of weird questions Rohith asks in one hour is 6 per chat. If Rohith chats with 5 people for 8 hours, how many weird questions will he ask?
(A) 240 (B) 30 (C) 78 (D) 19 (E) NOTA

17. In a typical day, Aditya talks to his friends by sending (as a proportion of the total sent) $\frac{1}{5}$ texts, $\frac{2}{5}$ Hangout messages, $\frac{1}{5}$ Snapchats, and $\frac{1}{5}$ Facebook messages. If he sends 40 Snapchats how many total messages (including Snapchats) does he send in a day?
(A) 150 (B) 200 (C) 40 (D) 80 (E) NOTA

18. What is the sum of the first 4 prime numbers?
(A) 21 (B) 24 (C) 6 (D) 3 (E) NOTA

19. On my desk there is a 3D model with one triangular base. Which of the following could the model be?
(A) Circle (B) Triangle (C) Pyramid (D) Prism (E) NOTA

20. Tom Brady likes his footballs to be inflated only 30% below the average allowed PSI (pressure per square inch) for footballs in the NFL. If the range of allowed PSI by the NFL is 20-30, then what is the PSI range that Tom Brady likes?
(A) 17.6-20 (B) 14-21 (C) 18.2-25 (D) 15-22.4 (E) NOTA

21. Which of the following signs makes this inequality true? $865 \_\_ 20 \times 42$
(A) $<$ (B) $=$ (C) $>$ (D) $\geq$ (E) NOTA

22. LeBron James can make 60% of his free throws in a season. Ian can make 62% of his free throws in a season. If both LeBron and Ian attempt 685 free throws in a season, how many more does Ian make than LeBron (round to the nearest whole number)?
(A) 14 (B) 13 (C) 12 (D) 15 (E) NOTA

23. Duarte has 5 lollipops, 6 chocolate bars, and 7 ice cream sandwiches in a bag. What is the probability that Duarte pulls 2 lollipops in a row without replacement?
(A) $\frac{158}{306}$ (B) $\frac{157}{306}$ (C) $\frac{5}{9}$ (D) $\frac{10}{153}$ (E) NOTA

24. What is the hundredths digit of $7.70144561424567 - 5.34$?
(A) -5 (B) 0 (C) 6 (D) 3 (E) NOTA

25. How many zeroes are at the end of the product 67000×50000?
(A) 5 (B) 6 (C) 7 (D) 8 (E) NOTA

26. It takes Ian 8 hours and 5 minutes to drive from Rickards High School to Atlanta, Georgia. If he goes .01 mile every second, how many miles does he drive to Atlanta?

(A) 291 (B) 29,100 (C) 30,000 (D) 2,910 (E) NOTA

27. Evaluate $6 + .01 + 10 \times 5$.

(A) 11.1 (B) 56.1 (C) 56.01 (D) 50.61 (E) NOTA

28. If you get exactly 10 questions right and exactly 5 questions wrong on this test, what is your score (Assume scoring system of 4 for every correct answer, -1 for every wrong answer, and 0 for every blank)?

(A) 34 (B) 35 (C) 20 (D) 5 (E) NOTA

29. Aditya is the worst at Fifa. Whenever he plays Pranav he only wins $\frac{6}{151}$ of the games, and they can never tie. If they play 151 games, how many games does Pranav win?

(A) 7 (B) 139 (C) 140 (D) 151 (E) NOTA

30. Mr. Harrington assigns 500 pages of History homework over the summer. If all Pranav does is play Fifa and can only read 10 words a day, and each page has 40 words, how many days will it take Pranav to finish his History homework?

(A) 50 (B) 200 (C) 2,000 (D) 1,500 (E) NOTA