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

1. Savannah is currently one more than twice the age of her cat, Selena Gomez. In thirteen years, Savannah will be 1.5 times as old as Selena. What is Savannah's current age?
(A) 12 (B) 23 (C) 24 (D) 11 (E) NOTA

2. Wenxin and Cherry decided to conduct a survey to see what was the most popular phrase used among Rickards' upperclassmen out of four given choices. They found that out of 500 students, 34% of people voted for the phrase "Same," 42% voted for "Bruh," 3% voted for "I missed focus blast," and 31% voted for "Brih." Find the number of students who voted for "Same."
(A) 170 (B) 15 (C) 210 (D) 105 (E) NOTA

3. Find the next term in the following sequence: $\frac{1}{16}$, $\frac{1}{4}$, 1 . . .
(A) $\frac{15}{16}$ (B) $\frac{7}{4}$ (C) 4 (D) $\frac{1}{4}$ (E) NOTA

4. Let A equal the sum of the first three prime numbers. Let B equal the product of the first four composite numbers. Find $A - B$.
(A) 1718 (B) -1718 (C) 358 (D) -358 (E) NOTA

5. Find the radius of a circle with an area of 706.5 in^2 to the nearest tenth of an inch. Use 3.14 for π.
(A) 15.0 in (B) 112.5 in (C) 14.8 in (D) 15.3 in (E) NOTA

6. Find the number of centimeters in a yard (Hint: There are 2.54 centimeters in an inch.)
(A) 105.68 cm (B) 90.00 cm (C) 86.40 cm (D) 91.44 cm (E) NOTA

7. Solve: $5 + 15 \div 3 - 10 \times (5 \div 2) + 3 \times 4 + 3$
(A) -6 (B) -18.3 (C) 20.5 (D) 0 (E) NOTA

Use the following information to solve questions 8-10:
Since Jasmine believes that barbecue chips are the best food to have ever been invented, she decided to find the number of people in 7 different teachers' classrooms that love barbecue chips too. She found the following data:

Classroom Teacher	Number of People Who Love Barbecue Chips
Mr. Harrington	7
Dr. Fraser	15
Ms. Walden	4
Ms. Pickett	10
Mr. Amstutz	5
Ms. Torres	6
Ms. McDonald	2

8. What is the average number of people per classroom who love barbecue chips?
(A) 4 (B) 5 (C) 6 (D) 7 (E) NOTA

9. What is $\frac{2}{3}$ multiplied by the median of the data set?
(A) $\frac{20}{3}$ (B) $\frac{10}{3}$ (C) 4 (D) 9 (E) NOTA

10. If Jasmine finds out that 9 people in Ms. Pickett's class lied about loving barbeque chips just to make her happy, what would be the difference between the range and the arithmetic mean in the new set of data to the nearest tenth?
(A) 8.1 (B) 8.2 (C) 8.3 (D) 8.4 (E) NOTA

11. Rayyan wants to buy the newest math book to add to his bookshelf. The original cost of the book is \$320 (it's a really, really good book), but the store marks down the price by 70%. What is the marked down price of the book?
(A) \$ 96.00 (B) \$ 224.00 (C) \$ 45.71 (D) \$ 274.29 (E) NOTA

12. There are currently 5 pairs of blue socks, 3 pairs of green socks, 7 pairs of yellow socks, 7 pairs of purple socks, and 1 pair of pink socks in a bag. What is the probability that two green socks are chosen from the bag without replacement on the first two attempts?
(A) $\frac{3}{253}$ (B) $\frac{15}{1058}$ (C) $\frac{9}{529}$ (D) $\frac{1}{69}$ (E) NOTA

13. The length of one side of a square is 9 ft. Find the area of the square in yards.
(A) 81 yd^2 (B) 9 yd^2 (C) 27 yd^2 (D) 36 yd^2 (E) NOTA

14. Evaluate $2x - 45$ if $x = 17$
(A) -11 (B) 11 (C) -26 (D) 26 (E) NOTA

15. Rida is obsessed with reading classic novels. If she can read 4 classic novels in 3.8 hours, how many classic novels can she read completely in 175 minutes?
(A) 2 (B) 3 (C) 4 (D) 5 (E) NOTA

16. Fifteen less than the product of 4 and a variable x is equal to twenty more than 13. What is the value of x?
(A) 6 (B) 15 (C) 12 (D) 5 (E) NOTA

17. Shardul has a box with a length of 6 ft, a width of 4 ft, and a height of 3 ft. If he wants to paint the outside of the box completely, what is the total area in ft^2 that he needs to paint?
(A) 144 ft^2 (B) 200 ft^2 (C) 72 ft^2 (D) 108 ft^2 (E) NOTA

18. Aditya buys 30 boxes of pizza to share with his 16 friends. If each box has eight slices and Aditya wants to keep 10 slices for himself, what is the greatest number of whole slices each of his friends can have if each friend gets the same number of slices?
(A) 14 (B) 15 (C) 14.4 (D) 15.4 (E) NOTA

19. Order the following from least to greatest: 53%, $\frac{7}{12}$, 0.56, $\frac{4}{7}$
(A) 53%, $\frac{7}{12}$, 0.56, $\frac{4}{7}$ (B) $\frac{4}{7}$, 53%, 0.56, $\frac{7}{12}$ (C) 53%, $\frac{7}{12}$, $\frac{4}{7}$, 0.56 (D) 53%, 0.56, $\frac{4}{7}$, $\frac{7}{12}$ (E) NOTA

20. Rida and Rayyan are both trying to get to Rickards High School. Rida travels 288 miles in 16 hours to get to Rickards and Rayyan travels 323 miles in 17 hours to get to Rickards. Who traveled the fastest?
(A) Rayyan (B) Rida (C) They both traveled the same speed. (D) Cannot be determined. (E) NOTA

21. What is the probability of choosing a number out of the first 100 positive integers that is greater than 55 and is a multiple of 3?
(A) $\frac{7}{50}$ (B) $\frac{3}{20}$ (C) $\frac{17}{100}$ (D) $\frac{16}{45}$ (E) NOTA

22. Find the volume of a right square pyramid if the figure has a base length of 5.4 in and a height of 13.3 in.
(A) 387.828 in^3 (B) 128.265 in^3 (C) 129.276 in^3 (D) 388.732 in^3 (E) NOTA

23. Simplify $\dfrac{\dfrac{27}{\dfrac{13}{6}}}{0}$

(A) $\dfrac{162}{13}$ (B) $\dfrac{27}{78}$ (C) 0 (D) Undefined (E) NOTA

24. Roehl rolls two fair six-sided die. What is the probability that the sum of the faces the die land on is greater than 8?

(A) $\dfrac{1}{4}$ (B) $\dfrac{5}{18}$ (C) $\dfrac{1}{9}$ (D) $\dfrac{11}{36}$ (E) NOTA

25. Meit has a very strict daily schedule that he needs to follow. After he sleeps for one third of the day, he spends 47% of the remaining time playing Pokemon on his phone. How many minutes does Meit play Pokmon in a normal 24 hour day? Show your answer as a mixed fraction.

(A) $451\dfrac{1}{5}$ minutes (B) $225\dfrac{3}{5}$ minutes (C) $196\dfrac{4}{5}$ minutes (D) $7\dfrac{13}{25}$ minutes (E) NOTA

26. Which of the following is equivalent to $6 \times x \times x^2(x^3)^2 \times y^4 \times 3 \times y$?

(A) $6x^{11}y^4$ (B) $18x^8y^5$ (C) $18x^9y^5$ (D) $6x^11 + 3y^4$ (E) NOTA

27. Evaluate $775.6890 - 32.5062$.

(A) 450.6270 (B) 452.6270 (C) 743.1828 (D) 745.1828 (E) NOTA

28. A triangle has one angle that measures $49°$. If the other two angles of the triangle are equal, what is the measure of each of the two remaining angles?

(A) $20.5°$ (B) $65.5°$ (C) $110.5°$ (D) $155.5°$ (E) NOTA

29. Kyle has a net diagram of a figure that consists of only four triangles. If he folds the net diagram into a three dimensional figure, what figure does Kyle have?

(A) Square Pyramid (B) Cube (C) Icosahedron (D) Triangular Pyramid (E) NOTA

30. Bob is the host of the 2016 Most Popular Country Convention. When announcing the winner, Bob accidentally announced his favorite country, Colombia, rather than the actual winner. The four finalists were Colombia, China, France, and Peru. Which country actually won if we know that the letters of the real winner's name can be arranged 120 different ways?

(A) China (B) France (C) Peru (D) Plot twist, Colombia actually did win (E) NOTA