For all questions, answer choice (E) NOTA means that none of the given answers is correct. Every correct question is worth 5 points, every blank question is 1 point, and every wrong question is worth 0 points. Good Luck!

1. Woody and Jessie are throwing around a pair of fair 6-sided of dice. What is the probability that both of the dice land on an even number?
   (A) $\frac{1}{2}$ (B) $\frac{1}{4}$ (C) $\frac{1}{8}$ (D) $\frac{1}{16}$ (E) NOTA

2. Bolt can run at a rate of 36 miles per hour. How many feet can Bolt run in 90 minutes?
   (A) 3240 (B) 32.4 (C) 48 (D) 54 (E) NOTA

3. Elsa can create 2^8 icicles in 5 minutes when she is alone, but when she is with Anna, she can create 2^5 icicles in 5 minutes. How many more icicles did she create when she was alone?
   (A) 39 (B) 6 (C) 128 (D) 224 (E) NOTA

4. Mulan wanted to see the longest number she could make that was divisible by 18. Which of the following numbers could be the one Mulan made?
   (A) 87512348956 (B) 94627530134 (C) 59143418082 (D) 24098661508 (E) NOTA

5. The Genie decided that three wishes was not enough. Rather, he thinks a better number of wishes is the sum of the x and y coordinates of the solution to the systems of equations: 2x + 3y = 16 and x + 2y = 10. How many wishes would someone be granted now?
   (A) 6 (B) 4 (C) 8 (D) 3 (E) NOTA

6. If Lumiere can light 3 candles in 2 minutes, how many days would it take to light 960 candles?
   (A) $\frac{32}{9}$ (B) $\frac{32}{3}$ (C) 12 (D) $\frac{4}{9}$ (E) NOTA

7. As Rapunzel climbed down her tower, her hair snagged on a loose nail and $\frac{1}{8}$ of her hair got cut off! What is $\frac{1}{8}$ as a percent?
   (A) 16% (B) 12.5% (C) 8% (D) 10% (E) NOTA

8. Nemo was placed in a 5 gallon tank that was filled halfway. How many cups of water are in the tank?
   (A) 40 cups (B) 48 cups (C) 80 cups (D) 96 cups (E) NOTA

9. Rapunzel's room is in the shape of a right triangle. It has a side length of 24 feet and a hypotenuse of 25 feet. What is the perimeter of the room?
   (A) 84 feet (B) 300 feet (C) 49 feet (D) 56 feet (E) NOTA

10. Merida likes to shoot arrows into a circular custom-made bullseye with a radius of $\sqrt{49}$ millimeters. What is the area of the bullseye?

(A) 7 mm (B) 49 mm (C) 49 sq mm (D) 7 sq mm (E) NOTA

11. In order to turn into a real boy, Pinocchio needs to tell the fairy the sum of the mean and median of the following set: 1, 3, 4, 4, 7, 8, 11, 20, 23. What number should he tell the fairy?

(A) 12 (B) 20 (C) 16 (D) 10 (E) NOTA

12. Every hour, Tinker Bell's speed changes in the form of a special sequence. In the first hour, she flies at 1 mile per hour, then in the second hour she flies at 1 mile per hour, the third hour at 2 miles per hour, the fourth hour at 3 miles per hour, and the fifth hour at 5 miles per hour. How fast will she be flying in the 8th hour?

(A) 21 mph (B) 14 mph (C) 19 mph (D) 25 mph (E) NOTA

13. Winnie the Pooh and Rabbit are building a fenced garden together. It will consist of a regular pentagon attached completely to one side of a square (so that they share one side) with a side length of 7 feet. Assuming there is only one region of space with no barrier within it, what is the perimeter of the garden?

(A) 70 feet (B) 56 feet (C) 63 feet (D) 49 feet (E) NOTA

14. Piglet sees the garden and thought it was an inefficient design. He redesigns it to be a triangle with a height of $\frac{1}{7}$ the size of its base. If the length of the base is 49, what is the area of the triangle in square feet?

(A) 171.5 (B) 196 (C) 245 (D) 220.5 (E) NOTA

15. Mater is making a diluted petrol solutions to slow down Lightning McQueen's opponents. He has 20% and 60% propanol solutions. He needs 10 liters of a 40% solution. How much of the 20% solution must he mix?

(A) 2 liters (B) 4 liters (C) 5 liters (D) 6 liters (E) NOTA

16. Dory found an inequality carved out into the hull of a sunken ship: $3x + 5 \geq 12$. Which of the following answers is not a solution to the inequality?

(A) $2\ \frac{1}{3}$ (B) $3\ \frac{2}{3}$ (C) $1\ \frac{1}{2}$ (D) $2\ \frac{1}{2}$ (E) NOTA

17. Doc was selling some medicine for \$100. Grumpy thought it was too expensive and told him to put a discount of 20%. Sneezy thought that the discount should be 10%. And Bashful thought that the discount should be 30%. So as a compromise, Doc decided to first use Grumpy's discount, then Sneezy's on top of that, and finally Bashful's. How much would the final medicine cost after all the discounts?

(A) \$64.20 (B) \$32.80 (C) \$40.00 (D) \$50.40 (E) NOTA

18. Mickey knows that Minnie loves squares, so he decided to make a drawing in the shape of a square. The side length is equal to the square root of the difference between the 26th and 25th prime number (in centimeters). What is the area of the square in square centimeters?

(A) 16 (B) 4 (C) 64 (D) 36 (E) NOTA

19. The clock struck 12. In a rush, Cinderella ran 20 feet to the south and then 21 feet west towards the exit. What is the shortest distance she could've ran instead?

(A) 29 feet (B) 41 feet (C) 20.5 feet (D) 25 feet (E) NOTA

20. Assuming Cinderella can run 4 feet in one minute, how many minutes would it take her if she took a route that was 6! – 5! + 3! + 2! feet long?

(A) 168 minutes (B) 144 minutes (C) 152 minutes (D) 180 minutes (E) NOTA

21. Ariel is selling her trinkets to some fellow mermaids. She has 7 chests, 3 candleholders, 4 mirrors, 2 thimbles, 4 paintings, 3 globes, an hourglass, 5 books, and a Jack in the Box. She is picking two items randomly without replacement to give to her sister before selling the rest of the trinkets. What is the probability that she first picks a mirror and then a book?

(A) $\frac{1}{29}$ (B) $\frac{3}{290}$ (C) $\frac{4}{145}$ (D) $\frac{2}{87}$ (E) NOTA

22. Belle is trying to sort her books based on page number: 652, 843, 123, 756, 468, 964, 533. The Beast sees this and decides to help. Belle tells the Beast that if he can tell her the interquartile range of the set, then she will dance with him tonight. What number should the Beast tell Belle for a dance?

(A) 375 (B) 415 (C) 355 (D) 405 (E) NOTA

23. Tiana can powder her beignets in 0.0367 seconds. What is that value in scientific notation?

(A) 36.7×10^{-3} (B) 3.67×10^{-2} (C) 367×10^{-4} (D) 0.367×10^{-1} (E) NOTA

24. If 3 gadgets equal 2 gizmos, 4 gizmos equal 8 whosits, 6 whosits equal 9 whatsits, and 18 whatsits equal 24 thingamabobs, how many gadgets equal 16 thingamabobs?

(A) 12 (B) 6 (C) 4 (D) 3 (E) NOTA

25. Dory aspires to be the next "Steve Jobs", but she needs to be a genius, and to be genius, she needs to know math. Dory wants to solve for the area bounded by the graph of $|x|+|y| = 6$. Dory needs your help, what is the answer to the question in units^2?

(A) 72 (B) 36 (C) 18 (D) 144 (E) NOTA

26. Jasmine drives a Cybertruck, which weirdly uses only 7 tires at a time and has one spare tire. To see what she knows about the car, Aladdin asks, "Since you only use 7 of the 8 tires at a time and you use each tire the same number of miles over some distance, how many miles does each tire get over a distance of 3200 miles?" What is the answer to Aladdin's question?

(A) 2400 miles (B) 800 miles (C) 2800 feet (D) 600 miles (E) NOTA

27. Anna's wedding is 157 days after her birthday. If her birthday is on a Wednesday, what day of the week will her wedding be?

    (A) Saturday (B) Wednesday (C) Friday (D) Sunday (E) NOTA

28. Anna's birthday is on August 17th. Knowing that her wedding is 157 days after her birthday, what is the date of her wedding?

    (A) February 2nd (B) January 21st (C) January 17th (D) January 3rd (E) NOTA

29. Buzz Lightyear knows that the distance from the Sun to Earth is 2 buzzyears away. If one buzzyear is equal to 4,224,000 feet, how many miles is the Earth from the Sun?

    (A) 200 (B) 400 (C) 600 (D) 800 (E) NOTA

30. At 6:06 PM, Jafar's shadow is 15 feet tall, and he is 6 feet tall. If Abu is 2 feet tall, how tall is his shadow at the same time?

    (A) 5 feet (B) 0.75 feet (C) 1.25 feet (D) 2.5 feet (E) NOTA