*For all questions, choice (E) NOTA means that none of the given answers is correct. Figures are not necessarily drawn to scale. Good Luck!*

1. What is 3.7×37?

    (A) 156.9   (B) 146.9   (C) 136.9   (D) 126.9   (E) NOTA

2. Mrs. Funk made 70 strawberry cookies for her favorite class. Mrs. Funk ate one cookie before passing them out to her 23 students. If each student gets the same number of cookies, then how many cookies did each student get?

    (A) 1   (B) 2   (C) 2.5   (D) 3   (E) NOTA

3. Find the missing number in this geometric sequence: 32, ___ , 8, 4, 2, 1....

    (A) 16   (B) 24   (C) 18   (D) 12   (E) NOTA

4. Mr. Fraser needs to grade 100 math tests. He graded 35 tests Monday afternoon spending 6 minutes per test. He graded the remaining tests Tuesday afternoon spending 4 minutes per test. How many hours in all did it take Mr. Fraser to grade his 100 math tests?

    (A) 8   (B) $\dfrac{47}{6}$ (C) $\dfrac{23}{3}$ (D) $\dfrac{15}{2}$ (E) NOTA

5. Using order of operations, what is $(12 \div 2 - 1) \times 4$?

    (A) 389   (B) 20   (C) 10   (D) 25   (E) NOTA

6. Grace bought a 24-pack of mechanical pencils. She gave 4 away on Wednesday, half of the remaining away on Thursday and 6 away on Friday. How many pencils does she have now?

    (A) 14   (B) 10   (C) 6   (D) 4   (E) NOTA

7. Express the fraction $\dfrac{2012}{3}$ as a mixed number in simplest form.

    (A) $670\dfrac{2}{3}$ (B) $671\dfrac{2}{3}$ (C) $670\dfrac{1}{3}$ (D) $671\dfrac{2}{3}$ (E) NOTA

8. There is a farm with 7 cows, 12 chickens, and 5 pigs. How many total legs are there in this farm, assuming that every cow and pig has 4 legs and every chicken has 2 legs?

    (A) 60   (B) 49   (C) 80   (D) 68   (E) NOTA

9. Jenny loves to read a certain math book. If Jenny reads 10 pages every day and there are 450 words on each page, how many words did she read from this math book in a week?

    (A) $31,500$ (B) $32,500$ (C) $33,500$ (D) $34,500$ (E) NOTA

10. Carolyn is playing a game and has two fair dice. If she must roll a 4 and 2 to win, then what is the probability that Carolyn loses?

    (A) $\dfrac{1}{36}$ (B) $\dfrac{1}{18}$ (C) $\dfrac{17}{18}$ (D) $\dfrac{35}{36}$ (E) NOTA

For Questions 11 and 12, use the following graph:

Stacy's Average Grade over Six Months
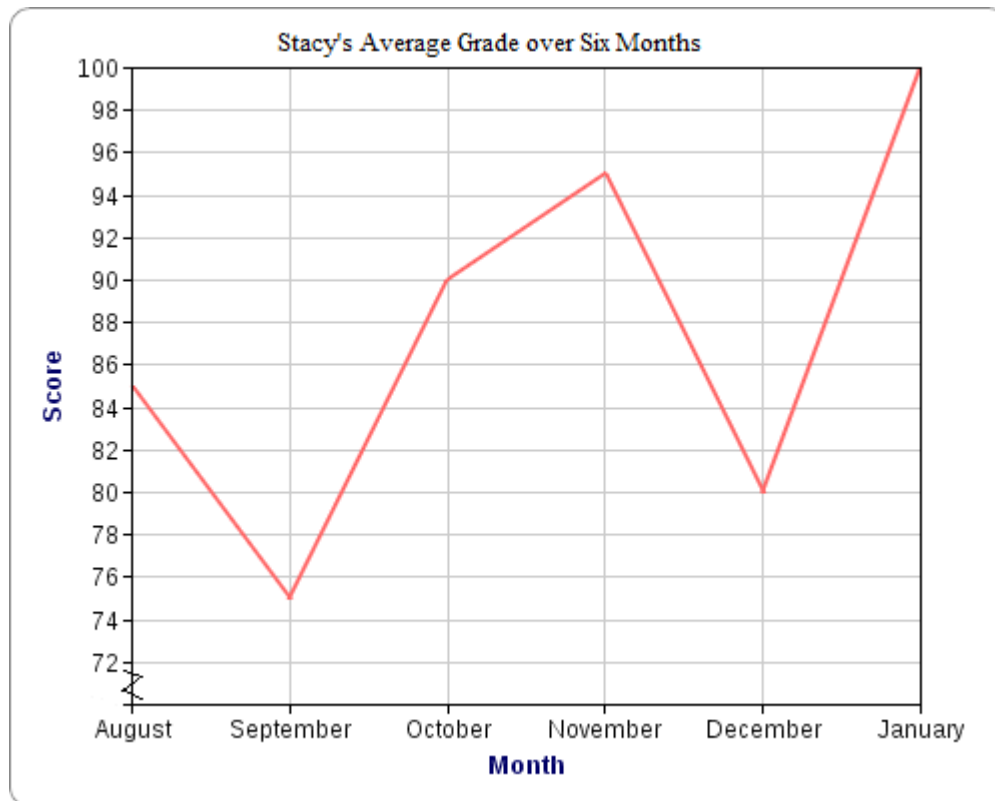
11. Stacy took three tests that accounted for her average grade in August. If Stacy scored a 92 and 78 on her first two tests, then what was the score of the third test?

   (A) 90   (B) 85   (C) 80   (D) 75   (E) NOTA

12. What is the range of Stacy's average grade throughout these six months?

   (A) 25   (B) 35   (C) 15   (D) 30   (E) NOTA

13. What is in the hundredths digit of $7.7798 - 5.34$?

   (A) 3   (B) 4   (C) 5   (D) 6   (E)NOTA

14. Mr. Cook has a 3-dimensional figure with a round base on his desk. Which of the following figures could it be?

   (A) cube   (B) rectangular prism   (C) sphere   (D) cone   (E) NOTA

15. Pamela has a bag of marbles containing two red marbles and 5 blue marbles. If Pamela randomly selects a marble from the bag, what is the probability that it is red?

   (A) $\dfrac{1}{2}$ (B) $\dfrac{2}{7}$ (C) $\dfrac{1}{7}$ (D) $\dfrac{1}{5}$ (E) NOTA

16. Eli shaved off his entire beard today. Eli's beard grows 1 millimeter a day. In one year (365 days) and 3 weeks, how long will Eli's beard be? (Hint: 1 centimeter= 10 millimeters)

    (A) 386 cm   (B) 386 mm   (C) 38.6 mm   (D) 3.68 cm   (E) NOTA

17. Alex came home from math practice one day and chatted with his friends online. He spent $\frac{1}{3}$ of an hour chatting with Mihir, and $\frac{1}{4}$ of an hour with Kevin. How many minutes did Alex spend chatting with his friends?

    (A) 15   (B) 20   (C) 30   (D) 35   (E) NOTA

18. If $x = 3$, then what is $7x - 13$?

    (A) 9   (B) 8   (C) 7   (D) 6   (E) NOTA

19. Simplify the expression $(7.3 - 3.6) + (1.6 + 5.4) \times 1.3$ and round your answer to the nearest integer.

    (A) 14   (B) 12.8   (C) 13   (D) 10.4   (E) NOTA

20. How many zeroes are at the end of the product, 2500×4000?

    (A) 5   (B) 6   (C) 7   (D) 8   (E) NOTA

21. Linda went to Nuberri to get some frozen yogurt. Her total was $15.87 so Linda paid with a $20 bill. However, the cashier only had quarters and pennies. If the cashier used as little of the pennies as he could, then how many quarters did Linda receive for her change?

    (A) 12   (B) 13   (C) 14   (D) 15   (E) NOTA

22. Which of the following numbers is a perfect number? (Hint: A perfect number is a positive number that is equal to its sum of proper positive divisors.)

    (A) 6   (B) 12   (C) 15   (D) 31   (E) NOTA

23. The sum of two numbers is 23 and their product is 132. What are the two numbers?

    (A) 3 and 20   (B) 10 and 13   (C) 9 and 14   (D) 11 and 12   (E) NOTA

24. Siddarth has a map of his neighborhood. The map shows that his house is 2.5 inches away from Stephen's house. If each inch on the map equals 1.5 miles, then how far in miles is Stephen's house from Siddarth's house in reality?

    (A) 3.5   (B) 3.75   (C) 4   (D) 4.5   (E) NOTA

25. What is 10% of 90% of 100?

    (A) 12   (B) 10   (C) 9   (D) 8   (E) NOTA

26. Which of the following signs makes the following inequality true: 89 ? 2×46?

    (A) <   (B) =   (C) >   (D) ≥   (E) NOTA

27. Awnish is seven years younger than twice his little sister's age. If his little sister is eleven years old, then how is Awnish?

    (A) 17   (B) 16   (C) 15   (D) 14   (E) NOTA

28. Annie has a piece of 5 cm x 5 cm paper in the shape of a square. She cuts out the corners in the shape of 1 cm × 1 cm squares as shown below.

    What is the area of the remaining piece of paper, in cm^2?

    (A) 21   (B) 24   (C) 18   (D) 16   (E) NOTA

29. Put the following fractions in order from least to greatest. $\left(\dfrac{1}{2}, \dfrac{1}{3}, \dfrac{4}{7}, \dfrac{2}{5}\right)$

    (A) $\dfrac{2}{5}, \dfrac{4}{7}, \dfrac{1}{2}, \dfrac{1}{3}$ (B) $\dfrac{4}{7}, \dfrac{1}{2}, \dfrac{1}{3}, \dfrac{2}{5}$ (C) $\dfrac{1}{2}, \dfrac{1}{3}, \dfrac{2}{5}, \dfrac{4}{7}$ (D) $\dfrac{1}{3}, \dfrac{2}{5}, \dfrac{1}{2}, \dfrac{4}{7}$ (E) NOTA

30. What is the total number of "t"s in this short sentence divided by three?

    (A) 4   (B) 3   (C) 2   (D) 1   (E) NOTA