The kids Phalaa and Adhiphalaa carry some fruits. Being tender and small, each could carry only a single-digit number of fruits. Adiphalaa has three times the fruits that Phalla has. If the digits corresponding to Phalla's and Adhiphalla's fruits are written in that order, the resulting two-digit number is a multiple of three. How many fruits does Adhiphalaa have? (number system)

   A. 6   C. 3

   B. 9   D. 8

Rajesh has ₹ 850 in his purse made up entirely of notes of ₹50 denomination. His wife Latha, on the other hand, has only notes of ₹20 denomination in her purse and they amount to ₹400. Rajesh and Latha redistribute the notes between the two purses so that if one were to choose one of the two purses at random and then randomly draw a note from it, the probability of the note being of ₹50 denomination is maximized. After this redistribution, there will be a total of ₹x in the purse with the larger amount of money. Find x. (probability)

   A. 850   C. 1200

   B. 1250   D. 1000

The expression $3x^2 - mx + 10$ leaves a remainder of -2 when divided by x-3. What's the value of m? (equations)

   A. 9   C. 11

   B. 12   D. 13

In the normal course Ravi, Sanjay and Mukund can each individually build a wall in 5,8 and 10 days respectively. Due to difficult conditions at the site, the individual time required for each to complete the work has increased by 20%,25% and 50% respectively. How long will they take to build the wall if they work together?

    A. 7   C. 4

    B. 3   D. 5

If a company A sells a service for ₹50 per hour then which of the following could be a revenue function for company A?

    A. 50   C. 50t

    B. t   D. 1

Using principle of moments, one can weigh any item using a single weighing stone. In one such experiment, a food packet was kept hanging at a distance of 15 cm to the left of a rod's center. It was countered by a 50 gm weighing stone, kept at a distance of 45cm to the right of the center. What's the wright of food packet?

    A. 100 gms   C. 150gms
    B. 200gms   D. 175gms

Some scientists interpret satellite data to mean that glaciers are melting faster than in earlier centuries. In each decade since industrial revolution, the amount of

glacier melt has doubled and some scientists predict that all the glaciers will have melted away by the year 2037. If indeed this was true, in which year would we have lost 50% of all the glaciers?

A. 2030   C. 2032

B. 2025   D. 2027

I have a two-digit number. The unit's digit is twice as ten's digit. If I reverse the number and subtract 36 from it, I get the initial number, What's the number started with? (number system)

A. 2   C. 4

B. 8   D. 6

Mary Meeker in her annual Internet Trends Report said that Americans are spending even more time digital media "6.3 hours a day in 2018, up by 5 percent from the year before". How much time did Americans spend with digital media in 2018 in a day? (Percentage)

A. 5 hours   C. 5.2 hours

B. 6.1 hours   D. 6 hours

A police car starts chasing a refugee in a BMW 3 hours after the BMW escapes from the scene of crime at 10 A.M. The BMW drives for 10Km through the crowded roads of Shanghai and then drives into a highway, where the traffic

allows vehicles to move twice as fast. After a while the police car finally catches up with BMW after a chase that lasted 4 hours. By this time the moon was up in the sky for 4 hours. If the average speed of the police car is 83 kmph, then the average speed of the BMW is? (Speed, Time)

A. 33.57 kmph   C. 48.43 kmph

B. 11.86 kmph   D. 47.43 kmph

There is a circular bookshelf under a stair in a library. The wall is 6 ft. in height, the distance of the base of the stairs from the corner of the room is 8ft. What is the radius of the circular bookshelf in feet? (Geometry)

A. 2   C. 3

B. 4   D. 5