Cosmo School

HOME ASSIGNMENT - 2020

Mathematics

CLASS: VIII

Time - 1 hours 30 minutes

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Creative Questions

1. 5,13,21,29,37....
   a. Express 29 and 37 as the sum of two square.
   b. Find the next number of the list.
   c. Find the sum of the first 50 numbers in the list.

2. If $x^2 + \frac{1}{x^2} = 3$,

   a. Determine the value of $\left(x + \frac{1}{x}\right)^2$
   b. Find the value of $\frac{x^6+1}{x^3}$
   c. Find the cube of $x^2 - \frac{1}{x^2}$

3. The length of a rectangular plot of land is 80m.Its breadth is 60m.In the middle of the land a tank with 3m depth is dug keeping 4m wide bank. 0.1 cubic meter water is emptied by a machine per second.

   a. Find the depth of the tank in inches.
   b. Find out the area of the bank of the pond.
   c. How much time is required to empty the tank?

Short Questions

1. What is 16% of tk.1050?

2. What is the simple profit of tk.1500 in 4 years at the rate of simple profit of 10% per annum?

3. In which century measurement of Fraction system was first introduce in France?

4. The word Deca comes from which language?

5. How many furlongs make a mile?

6. Two furlongs is equal to how many yards?

7. One Acre is equal to how much square meter?

8. What is the arithmetic mean of the numbers 8,12,16,17,20 ?

9. What is the median of the numbers 10,12,14,18,19,25 ?

10. What are the modes of the numbers 8,15,15,7,12,14,7,11?

11. How many Gonda make a Chatak ?

12. What is the main unit of weight?

13. The measurement of semicircular angle is …?

14. If a=1,b=2,c=-3; what is the value of abc ?

15. 2500 liter =…..cubic meter?

16. What is the formula for finding the perimeter of a circle?

17. The angle in the semi-circle is a ….. Angle?

18. What is the 7th number of the pattern 1,4,8,13,.......?

19. If (a+b)=7 ,(a-b)=3, then what will be the value of $(a^2 + b^2)$?

20. How many prime numbers are there between 1 to 50?

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