

## HOLIDAY ASSIGNMENTS(2020-21)

### CLASS VIII

### Mathematics

#### Note:-

Assignments should be done in separate "Test Copy". It carries 10 marks weightage. It is compulsory and students must submit on the day school reopens. In first periodic test this 10 marks will be added with theory marks.

1) Represent  $\frac{2}{3}, \frac{-5}{6}, \frac{8}{3}$  on a number line.

2) List five rational numbers between  $\frac{-4}{5}$  and  $\frac{-2}{3}$ .

3) Simplify:  $\frac{2^6 \times 3^4}{6^5}$

4) Simplify:  $(2^{-1} \div 5^{-1})^2 \times (\frac{-5}{8})^{-1}$

5) If  $(25)^{n-1} + 100 = (5)^{2n-1}$ , find the value of n.

6) Simplify:  $\frac{16 \times 2^{n+1} - 4 \times 2^n}{16 \times 2^{n+2} - 2 \times 2^{n+2}}$

7) Take away  $(2x^2 - 5x + 7)$  from  $(3x^2 + 4x - 6)$

8) Simplify:  $(x^2 - x) - \frac{1}{2}(x - 3 + 3x^2)$

9) Find the product of  $(x + 2)(x^2 + 3x + 5)$

10) Ajit earns ₹ 17000 per month. After getting an increment his salary becomes ₹ 21,250. Find the percentage increase in his salary.

11) Find 60% of a number if 15% of the number is 400.

12) If the cost price of 6 dolls is equal to the selling price of 5 dolls, find the profit percentage.

13) By selling 20 books, a woman gain an amount equal to the selling price of 2 books. Find her profit percent.

14) Show that in an isosceles triangle, the angle opposite to the equal sides are equal.

15) Prove that the bisector of the vertical angle of an isosceles triangle bisects the base at right angles.

16) A card is drawn at random from a pack of 52 cards. Find the probability that the card is (i) a face card (ii) Not a spade (iii) A multiple of 3.

17) Two dice are rolled together find the probability of getting (i) a doublet (ii) An odd number on second dice (iii) sum more than 6.

18) A rectangular garden is of length 50m and breadth 30m. A path of 3.5m width is made inside the garden. Find the area of path.

19) A triangular field is of base 24m and height 15m. Find the cost of lying grass inside the field at ₹ 15 per  $m^2$ .

20) A wire is bent in shape of square of side 66cm. If the same wire is looped in form of circle. Find the area of circle.

21) A cow is tied to a pole on one end of a rectangular park with a string 14m. find the area over which the cow can graze.

22) Determine the value of x:  $\frac{x-2}{3} - \frac{x-3}{6} = 5 - \frac{x-3}{18}$

23)  $3.8y - 8 = 2.3y + 7$ , find y.

24) A train covers a distance of 51 km in 45 min. How long will it take to cover 221 km.

25) If 36 men can finish a piece of work in 25 days, in how many days will 15 men take to do it.