

Holidays Assignment

Class - VII

Mathematics

1. Solve $m - \frac{m-1}{2} = 1 - \frac{m-2}{3}$

2. Solve $0.16(5x-2) = 0.4x+7$

3. Solve $\frac{x}{2} + \frac{x}{4} + \frac{x}{5} + 10000 = x$

4. Solve $\frac{5x}{2} - 4 = \frac{2x}{5}$

then find the value of $2x-7$

5. (i) If the diagonals of a quadrilateral bisect each other at right angles, it will be a _____

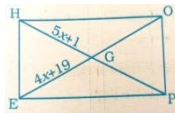
(ii) The sum of the angles of a quadrilateral is _____

(iii) Ram has farm land which is triangular in shape. What is the sum of all the exterior angles taken in an order of the farm land? _____

(iv) The number of diagonals in a Polygon of n sides is _____.

6. The ratio of exterior angle to interior angle of a regular Polygon is 1:4. Find the number of sides of the Polygon.

7. In the figure HOPE is a rectangle. Its diagonals meet at G.



If $HG = 5x+1$ and $EG=4x+19$. Find x .

8. Each interior angle of a polygon is 108° . Find the number of sides of the Polygon.

9. Draw a pie chart for the given data

Favourite Food	North Indian	South Indian	Chinese	Others
No. of People	30	40	25	25

10. When a die is thrown, find the probability of getting.

(a) a prime number

(b) a number greater than 3

(c) a number less than 4

11. A bag has 5 red balls, 6 blue balls and 3 yellow balls. A ball is drawn from the bag without looking into the bag.

(a) Find the probability of getting pink ball.

(b) Find the probability of getting yellow ball.

(c) Find the probability of getting a non-blue ball.

12. The number of students in a hostel, speaking different languages is given below.

Display the data in pie chart

Language	No. of Students
Hindi	12
English	40
Marathi	7
Tamil	4
Bengali	9
Total	72

13. $\frac{9-3p}{1-9p} = \frac{8}{3}$

$$14. \frac{y-(4-3y)}{2y-(3+4y)} = \frac{1}{5}$$

$$15. \frac{1}{2}(x+1) + \frac{1}{3}(x-1) = \frac{5}{12}(x-2)$$

16. There is a pack of well shuffled deck of 52 playing cards?

(a) Find the probability of getting a number 10.

(b) Find the probability of getting a king.

17. Write the Pythagorean triplet whose one number is

(a) 80 (b) 65

18. Find the square of the following.

(a) $(51+2)$ (b) $(36+1)$ (c) $(23+4)$

$$19. \text{Solve } \left(1 - \frac{1}{x+1}\right) \left(1 - \frac{1}{x+2}\right) \left(1 - \frac{1}{x+3}\right) \left(1 - \frac{1}{x+10}\right)$$

20. Write two Hardy Ramanujan numbers.

21. What should be added to twice the rational number $-\frac{7}{3}$ to get $\frac{3}{7}$?

22. Arrange $\frac{1}{4}, \frac{13}{16}, \frac{5}{8}$ in descending order.

23. Check whether 90 is a perfect square or not by using prime factorization.

24. The present age of father is four times the age of his son. After 10 years, age of father will become three times the age of the son. Find their present ages.

25. Find the smallest square number which is divisible by 3, 4, 5, and 6.

26. Construct a quadrilateral ABCD where AB=4cm, BC=5cm, CD=6.5cm and $\angle B=105^\circ$ and $\angle C=80^\circ$

27. In a parallelogram, one angle is of 70° . Find other angles.

28. Find the greatest 4 digit number which is a perfect square.

29. Find the square root of

(i) 8100 (ii) 3481

30. Find the smallest whole number by which it should be divided so as to get a perfect square root of the square number do obtained.

(i) 396 (ii) 1620 (iii) 980