CLASS VIII   FULL MARKS 80

SUBJECT MATHS   TIME 3 HOURS

ALL QUESTIONS ARE COMPULSORY.ATTEMPT ALL QUESTIONS

SECTION A (MCQ Each of 1 marks)

1.   Sum of rational number $\frac{5}{7}$ and its reciprocal is

   (a) $2\frac{4}{35}$ (b) 0   (c) $\frac{4}{35}$ (d) none of these

2.   Product of two rational numbers is 1 . If one of them is $\frac{4}{5}$,then other is

   (a) $\frac{-4}{5}$ (b) $\frac{-5}{4}$ (c) $\frac{5}{4}$ (d) none of these

3 .   The product of (x-4) and (2x+3) is

   (a) x^2-5x-12 (b) $2x^2$-5x-12   (c) x^2 -12x+5 (d) none of these

4. The smallest number by which 192 should be multiplied to make it a perfect cube is

   (a) 9   (b) 6   (c) 3   (d) 2

5. How many natural numbers lie between 25^2 and 26^2 ?

   (a) 49   (b) 50   (c) 51   (d) 52

6.   . Curved surface area of a cylinder is

(a $2\pi rh$ (b) $3\pi rh$ (c) $2\pi r^2 h$ (d) none

7.   If the sum of three consecutive integers is 51 then the smallest integer is

   (a) 16   (b) 17   (c) 18   (d) 19

8.   When a dice is thrown then the probability of getting even number is

   (a) 0   (b) $\frac{1}{2}$ (c) 1   (d) none of these

9.   The length of the longest rod that can be placed in a room of dimensions 10m×10m×5m is

   (a) 15 m   (b) 16 m   (c) $10\sqrt{5}$m   (d) 12 m

10.   If each interior angle of a regular polygon is 144° then the number of sides of polygon is

   (a) 8   (b) 9   (c) 10   (d) 11

11.   The sum of all exterior angles of a pentagon is

   (a) 180   (b) 360   (c) 590   (d) none of these

12.   Naman buys a toy for Rs 60 and sells it for Rs 75, his profit % is

(a) 15%   (b) 20 %   (c) 25%   (d) 30 %

13.   The square root of 12321 is

(a) 101   (b) 111   (c) 112   (d) none of these

14. $\sqrt{208 + \sqrt{2304}}$ is

(a) 18   (b) 16   (c) 14   (d) none of these

15.   If one number of Pythagorean triplet is 6 , then the triplet is

(a) (4,5,6)   (b) (5,6,7)   (c) (6,7,8)   (d) none of these

16.   A loaded truck travels 14 km in 25 minutes. If the speed remains same how far can it travel in 5 hours ?

(a) 164 km   (b) 168 km   (c) 170 km   (d) 172 km

17.   In the expression 3x(4x-5)+3 if we take x=3 then it is equal to

(a) 64   (b) 65   (c) 66   (d) none

18.   In a scout camp there is food provision for 300 cadets for 42 days , if 50 more persons join the camp , for how many days will the provision last ?

(a) 32 days   (b) 34 days   (c) 36 days   (d) 38 days

19.   If ABCD is a rhombus such that < ABD =50° then <BCD is

(a) 40°   (b) 90°   (c) 50°   (d) none of these

20. The $\sqrt[3]{50653}$ is

(a) 47   (b) 37   (c) 57   (d) 27

SECTION B (each of 2 marks)

21.   Divide (x² + 20 x +75) by(x +5) ?

22.   Find the square root of 3136 by prime factorization method ?

23.   . Find the area of a rhombus whose diagonals are of length 10 cm and 8.2 cm?

24. Find a Pythagorean triplet in which one member is 12 ?

25.   solve $\frac{8x-3}{3x}$ =2

26.   Find the measure of each exterior angle of a regular polygon of 9 sides ?

27.   . A suitcase with measure 80 cm x 48 cm x 24 cm is to be covered with a cloth. How many meters of cloth of width 96 cm is required to cover 100 such suitcases ?

28.   If 15 men can do a work in 12 days, how many men will do the same work in 6 days ?

SECTION C (each of 3 marks)

29. If Chameli had Rs 600 left after spending 75% of her money, how much did she have in the beginning ?

30. Find the least number which must be added to 5678 so as to get a perfect square number, also obtain its square root ?

31. Parikshit makes a cuboid of plasticine of sides 5 cm ,2 cm,5 cm. How many such cuboids will he need to form a cube ?

32. A road roller takes 750 complete revolutions to move once over to level a road, Find the area of road if the diameter of a road roller is 84 cm and length is 1 m ?

   OR The population of a place increased to 54,000 in 2003 at the rate of 5 % per annum , Find the population in 2001 ?

33. Solve by cross multiplication method $\dfrac{7y+4}{y+2} = \dfrac{-4}{3}$

34. In a parallelogram ABCD if <A = 70° then find the measure of all other angles ?

35. The price of a TV is Rs 13000. The sales tax charged on it is at the rate of 12%. Find the amount that Vinod will have to pay if he buys it ?

36. Find three rational numbers between $\dfrac{3}{5}$ and $\dfrac{3}{4}$?

SECTION D(each of 4 marks)

37. . The area of a trapezium is 34 cm^2 and the length of one of the parallel sides is 10 cm and its height is 4 cm .Find the length of the other side?.

38. The number of students in a hostel, speaking different languages is given below. Display the data in a GRAPH.
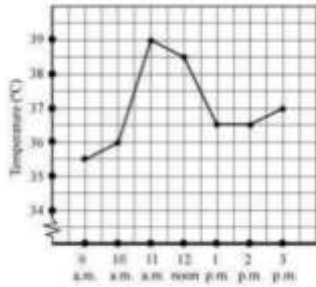
Language	Hindi	English	Marathi	Tamil	Bengali	Total
No. of students	40	12	9	7	4	72

39. Observe the figure carefully and answer the following questions ?
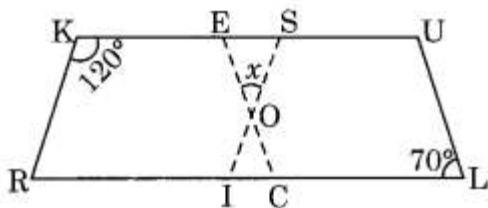
   (1) Name the quadrilateral KURL and KRIS ?

   (2) Find the value of x ?

40.   . A closed cylindrical tank of radius 7 m and height 3 m is made from a sheet of metal. How much sheet of metal is required ?

41. .   If   the following graph shows the temperature of a patient in a hospital, recorded every hour.

(a) What was the patient's temperature at 1 p.m.?

(b) When was the patient's temperature 38.5°C?

(c) The patient's temperature was the same two times during the period given. What were these two times?

(d) What was the temperature at 1.30 p.m? How did you arrive at your answer?

(e) During which periods did the patient's temperature show an upward trend?

THE END