TRUE OR FALSE

CLASS - 8

1. 0 is the smallest rational number.
2. $\frac{-4}{5}$ lies to the left of $\frac{-3}{4}$
3. $\frac{-19}{5}$ is greater than $\frac{15}{-4}$
4. The average of two rational numbers lies between them.
5. There are an unlimited number of rational numbers between 10 and 11.
6. All the rational numbers have an additive inverse.
7. The rational numbers that are equal to their additive inverses are 0 and -1.
8. The additive inverse of $\frac{-11}{-17}$ is $\frac{11}{17}$.
9. The rational number which is its own reciprocal is -1.
10. The multiplicative inverse exists for all rational numbers.
11. When a square number ends in 6, its square root will have 6 in the unit's place.
12. A square number will not have odd number of zeros at the end.
13. The number of zeros in the square of 91000 is 9.
14. The square of 75 is 4925

S. PURATCHIVENDHAN M.Sc., M.Ed., M.Phil

15. The square root of 225 is 15.
16. The cube of 24 ends with the digit 4.
17. Subtracting 10^3 from 1729 gives 9^3.
18. The cube of 0.0012 is 0.000001728.
19. 79570 is not a perfect cube.
20. The cube root of 250047 is 63.
21. If $8^x = \frac{1}{64}$, the value of x is -2.
22. The simplified form of $(256)^{-\frac{1}{4}} \times 4^2$ is $\frac{1}{4}$.
23. Using the power rule, $(3^7)^{-2} = 3^5$
24. The standard form of 2×10^{-4} is 0.0002.
25. The scientific form of 123.456 is 1.23456×10^{-2}
26. $8x^3y \div 4x^2 = 2xy$.
27. $7ab^3 \div 14ab = 2b^2$.
28. The shifting of a number from one side of an equation to other is called transposition.
29. Linear equation in one variable has only one variable with power 2.
30. "Sum of a number and two times that number is 48" can be written as $y+2y=48$.
31. $5(3x+2) = 3(5x-7)$ is a linear equation in one variable.
32. $x=25$ is the solution of one third of a number is less than 10 the original number.
33. (-10, 20) lies in the second quadrant.
34. (-9, 0) lies on the x-axis.
35. The coordinates of the origin are (1, 1).

36. The points (1,1), (2,2) (3,3) lie on a same straight line.

37. $y = -9x$ not passes through the origin.

38. Depreciation value is calculated by the formula, $P\left(1 - \frac{r}{100}\right)^n$.

39. If the present population of a city is P and it increases at the rate of r % p.a, then the population n years ago would be $P\left(1 + \frac{r}{100}\right)^n$.

40. The present value of a machine is ₹16800. It depreciates at 25% p.a. Its worth after 2 years is ₹9450.

41. The time taken for ₹1000 to become ₹1331 at 20% p.a, Compounded annually is 3 years.

42. The compand interest on ₹16000 for 9 months at 20% p.a, Compounded quarterly is ₹2522.

43. 8, 15, 17 is a Pythagorean triplet.

44. In a right angled triangle, the hypotenuse is the greatest side.

45. In any triangle the centroid and the incentre ~~are located inside the triangle~~.

46. The centroid, orthocentre, and incentre of a triangle are collinear.

47. The incentre is equidistant from all the vertices of a triangle.

48. Inclusive series is a continuous series.

49. Comparison of parts of a whole may be done by a pie chart.

50. Media and business people use pie charts.

51. A pie diagram is a circle broken down into component sectors.

— S. PURATCHIVENDHAN M.Sc., M.Ed., M.Phil

ANSWERS:

1. False	18. False	35. False
2. True	19. True	36. True
3. False	20. True	37. False
4. True	21. True	38. True
5. True	22. False	39. False
6. True	23. False	40. True
7. False	24. True	41. False
8. False	25. False	42. True
9. True	26. True	43. True
10. False	27. False	44. True
11. True	28. True	45. True
12. True	29. False	46. True
13. False	30. True	47. False
14. False	31. False	48 False
15. True	32. False	49. True
16. True	33. True	50. True
17 True	34. True	51. True.