

CBSE TEST PAPER-03
CLASS - IX MATHEMATICS (Number System)

- 1) Define a rational number with example.
- 2) Find a rational number between $-1/4$ and $-1/3$
- 3) Is every integer is a rational number? Give reason.
- 4) Express $0.\overline{53}$ as a vulgar fraction.
- 5) Simplify $(9/25)^{-3/2}$
- 6) Write an irrational number between 2 and 3
- 7) Rationalize the denominator $\frac{1}{\sqrt{3}+\sqrt{7}}$
- 8) Prove with help of two examples product of a rational and irrational number may be rational or irrational.
- 9) Rationalize the denominator $\frac{3-\sqrt{7}}{3-4\sqrt{7}}$
- 10) Represent 0.93 in rational form.
- 11) Represent $1.\overline{23}$ on number line by successive magnification
- 12) Represent $0.9\overline{3}$ on number line
- 13) If $a=1-\sqrt{2}$ find $(a-\frac{1}{a})^3$
- 14) If $x=3+2\sqrt{2}$ find $x^4 + \frac{1}{x^4}$
- 15) If $x=\frac{1}{2-\sqrt{3}}$, prove that $x^3 - 2x^2 - 7x + 5 = 3$