

Concept_Grade-9_Real Numbers

Irrational Numbers

1. Identify an irrational number among the following numbers : 0.13, $0.13\overline{15}$, $0.\overline{1315}$, 0.3013001300013 ...
2. Is the product of two irrational numbers always a irrational number?
3. Write the sum of $2\sqrt{5}$ and $3\sqrt{7}$.
4. Calculate the irrational number between 2 and 2.5.
5. Simplify the number $(\sqrt{2} + \sqrt{5})^2$
6. Find any two irrational numbers between 0.1 and 0.12
7. Find any two irrational numbers between 0.5 and 0.55
8. Find an irrational number between $\frac{1}{7}$ and $\frac{2}{7}$ when it is given that $\frac{1}{7} = 0.142857$
9. Find three irrational numbers between $\frac{5}{7}$ and $\frac{9}{11}$
10. Examine whether $\sqrt{2}$ is rational or irrational.
11. Give an example of two irrational numbers whose:
 - (i) difference is an irrational number,
 - (ii) sum is an irrational number,
 - (iii) product is an irrational number,
 - (iv) division is an irrational number.Justify also.

