

NUMBER SYSTEM

1. Write decimal form of $\frac{563}{100}$
2. Write decimal form of $\frac{6}{1000}$
3. Write decimal form of $\frac{3}{11}$.
4. Find a rational number between $-\frac{3}{7}$ and $\frac{1}{3}$
5. Express $0.77777\dots$ in $\frac{p}{q}$ form .
6. Show that $1.272727\dots$ can be expressed in the form $\frac{p}{q}$ where p and q are integers, $q \neq 0$.
7. Express $\frac{2157}{625}$ in decimal form
8. Convert into p/q form: $22.434343\dots$
9. Express $32.12353535\dots$ in the form $\frac{p}{q}$.

10. Write $0.6 + 0.777\dots + 0.474747\dots$ in the form of $\frac{p}{q}$.

11. Write the rationalisation factor of $\sqrt{50}$.

12. Simplify $(3 + \sqrt{3})(2 + \sqrt{2})$.

13. Simplify $(3\sqrt{5} - 5\sqrt{2})(4\sqrt{5} + 3\sqrt{2})$.

14. Simplify $\frac{2\sqrt{3}}{3} - \frac{\sqrt{3}}{6}$.

15. Rationalise $\frac{1}{\sqrt{7}}$

16. Rationalise the denominator $\frac{1}{\sqrt{7} - \sqrt{6}}$

17. Rationalise the denominator $\frac{3}{\sqrt{7} - \sqrt{2}}$.

18. Rationalise $\frac{6 - 4\sqrt{3}}{6 + 4\sqrt{3}}$.

19. Simplify $\frac{\sqrt{6}}{\sqrt{2} + \sqrt{3}} + \frac{3\sqrt{2}}{\sqrt{6} + \sqrt{3}} - \frac{4\sqrt{3}}{\sqrt{6} + \sqrt{2}}$

20. Simplify $\frac{1}{\sqrt{2} + 1} + \frac{1}{\sqrt{3} + \sqrt{2}} + \frac{1}{\sqrt{4} + \sqrt{3}} + \frac{1}{\sqrt{5} + \sqrt{4}}$