

Concept_Grade-9_Real Numbers

Rationalization

1. Write the rationalizing factor of $\frac{1}{\sqrt{50}}$
2. Rationalize the denominator of $\frac{2}{3\sqrt{3}}$
3. If $\sqrt{2} = 1.414$, then, find the value of $\frac{1}{\sqrt{2}+1}$
4. Taking $\sqrt{2} = 1.414$ and $\pi = 3.141$ evaluate $\frac{1}{\sqrt{2}} + \pi$ upto three places of decimal.
5. If $x = 3 - 2\sqrt{2}$, find the value of $\sqrt{x} + \frac{1}{\sqrt{x}}$
6. Rationalize the denominator : $\frac{1}{2\sqrt{7}+3\sqrt{3}}$
7. If $x = \frac{1}{3-2\sqrt{2}}$ and $y = \frac{1}{3+2\sqrt{2}}$, then find the value of $x + y + xy$.