CBSEASSISTANCE.COM

NUMBER SYSTEM

ASSIGNMENT NO. 7

1. Simplify: $6\sqrt{3} + 5\sqrt{12}$
2. Simplify: $\left(-3 + \sqrt{5}\right)\left(-3 - \sqrt{5}\right)$
3. If $x = 8$, find the value of $\sqrt[3]{x} + x - 5$
4. Simplify: $8\sqrt{45} - 8\sqrt{20} + \sqrt{245} - 3\sqrt{125}$
5. Simplify: $\left(4\sqrt{5} - 3\sqrt{2}\right)\left(4\sqrt{5} + 3\sqrt{2}\right)$
6. Simplify: $\left(5 + \sqrt{5}\right)\left(3 + \sqrt{3}\right)^2$
7. If $x = \frac{1}{2-\sqrt{3}}$, find the value of $x^2 - 4x + 1$
8. If $x = 7 + 4\sqrt{3}$, find the value of $\sqrt{x} + \frac{1}{\sqrt{x}}$
9. Rationalize the denominator of $\frac{4\sqrt{3}+5\sqrt{2}}{4\sqrt{3}+3\sqrt{2}}$
10. If $x = 2 + \sqrt{3}$, find the value of $\left(x - \frac{1}{x}\right)^3$