

The City School

University Road Campus
MATRIC SECTION (10th)



MATHEMATICS

EXERCISE 2.8

Q1. Rationalize the following question.

$$\frac{1}{2 + \sqrt{3}}$$

Q2. If $x = 4 + \sqrt{3}$ find the value of $x + \frac{1}{x}$ and $x^2 + \frac{1}{x^2}$.

Q3. If $p = 3 + 2\sqrt{2}$, find the values of $p + \frac{1}{p}$ and $p^2 + \frac{1}{p^2} = ?$

Q4. If $y = \sqrt{5} - 2$, find the values of $y + \frac{1}{y}$, $y - \frac{1}{y}$ & $y^2 - \frac{1}{y^2}$

Q5. If $\frac{1}{b} = 2 + \sqrt{3}$, find the value of $b^4 + \frac{1}{b^4}$.