

Given Equation :

$$g(x) = (\sqrt{x} + 1) + (\sqrt{x} - 2) = g(x) = 2\sqrt{x} + 3$$

Here Domain is $D_f = [-\infty, \infty)$

$$\text{Range is } R_f = \left(\frac{1}{2}\right)$$

Calculus Notations:

$$\lim_{x \rightarrow \infty} = x^2 + 2 \quad (1)$$

$$x^2 = 0 \quad (2)$$

$$\lim_{x \rightarrow \infty^+} \frac{|\sqrt{x} - 3|}{x - 9} \quad (3)$$

$$(4)$$

$$\int \frac{x^2-1}{(x^2+1)\sqrt{x^4+1}} dx = -x - \frac{x^2}{2} + \frac{x^3}{3} + C$$

$$\int \frac{x^2-1}{(x^2+1)\sqrt{x^4+1}} dx = -x - \frac{x^2}{2} + \frac{x^3}{3} + C \quad (5)$$

$$\int_{21}^{20} \frac{x^2-1}{(x^2+1)\sqrt{x^4+1}} dx = -x - \frac{x^2}{2} + \frac{x^3}{3} + \frac{x^3}{3} \quad (6)$$

$$\vec{v} = 4\vec{i} + 5\vec{j} + 6\vec{k} = \langle 4, 5, 6 \rangle \quad (7)$$

$$\sum_{n=1}^{100} = X^2 + \Delta(f_n) + \gamma \quad (8)$$