

Q → Find the root of the following equations correct upto four decimal places

1) $x^5 + 5x - 1 = 0$

2) $x^5 + x^2 - 1 = 0$

3) $x^5 - x^3 - 2x^2 - 6x - 4 = 0$

Q → use regula-falsi method to find the root of $2x - \log_{10} x = 7$, which lies between 3.5 and 4, correct upto five places of decimal.

Q → using regula-falsi method, find the root of

(a) $x^2 + x + 1 = 0$ correct upto three decimal places

(b) $xe^x = 3$ correct upto three decimal places

Q → Find the positive root of $x^2 - x = 10$ correct upto three decimal places, using Newton-Raphson method.

Q → using Newton-Raphson method, find the root of

(a) $x - \log_{10} x = 1.2$ correct upto five decimal places.

Q → using Newton-Raphson method, find

(a) $\sqrt{5}$

(b) $1/\sqrt{14}$