

10th Maths - Chapter 4

This is Problem-1(v) from Exercise 4.2
find the roots of the quadratic equation

$$100x^2 - 20x + 1 = 0$$

Solution: :

$$\begin{aligned}x &= \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \\x &= \frac{20 \pm \sqrt{-20^2 - 4 \times 100 \times 1}}{2 \times 100} \\x &= \frac{20 + \sqrt{400 - 400}}{200} \\x &= \frac{20 + \sqrt{0}}{200} \\x &= \frac{20}{200} \\x &= \frac{1}{10}\end{aligned}$$