10^{th} Maths - Chapter 4

This is Problem-1(v) from Exercise 4.2

1. Find the roots of the quadratic equation

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

(2)

Solution: :

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \tag{3}$$

$$x = \frac{20 \pm \sqrt{-20^2 - 4 \times 100 \times 1}}{2 \times 100}$$

$$x = \frac{20 \pm \sqrt{400 - 400}}{200}$$
(5)

$$x = \frac{20 \pm \sqrt{400 - 400}}{200} \tag{5}$$

$$x = \frac{20 \pm \sqrt{0}}{200}$$

$$x = \frac{20}{200}$$

$$x = \frac{1}{10}$$
(6)
$$x = \frac{1}{10}$$
(8)

$$x = \frac{20}{200} \tag{7}$$

$$x = \frac{1}{10} \tag{8}$$