

Quadratic equations

patnana sai charvi (PatnanaSaiCharvi@sriprakashschools.com)

August 9, 2023

10th Maths - Chapter 4

This is Problem-1(iv) from Exercise 4.2

1. Solve $16x^2 - 8x + 1 = 0$

Solution:

$$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \quad (1)$$

$$x = \frac{8 \pm \sqrt{8^2 - 4 \times 16 \times 1}}{2 \times 16} \quad (2)$$

$$x = \frac{8 \pm \sqrt{64 - 64}}{32} \quad (3)$$

$$x = \frac{8 \pm \sqrt{0}}{32} \quad (4)$$

$$x = \frac{8}{32}, \frac{8}{32} \quad (5)$$

$$x = \frac{1}{4}, \frac{1}{4} \quad (6)$$

$$(7)$$