## $10^{th}$ Maths - Chapter 4

This is Problem-1(iii) from Exercise 4.2  $(\sqrt{2}x^2 + 7x + 5\sqrt{2}) = 0$ 

## **Solution:**

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

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

$$= x = \frac{-7 \pm \sqrt{-7^2 - 4 \times \sqrt{2} \times 5\sqrt{2}}}{2 \times \sqrt{2}}$$

$$= x = \frac{-7 + \sqrt{49 - 40}}{2\sqrt{2}}$$
(2)
$$= x = \frac{-7 + \sqrt{49 - 40}}{2\sqrt{2}}$$
(3)

$$=x = \frac{-7 + \sqrt{49 - 40}}{2\sqrt{2}}\tag{3}$$

$$= x = \frac{-7 + \sqrt{9}}{2\sqrt{2}} \tag{4}$$

$$=x = \frac{-4}{2\sqrt{2}}\tag{5}$$

$$= x = \frac{-4 \times 2\sqrt{2}}{2\sqrt{2} \times 2\sqrt{2}} \tag{6}$$

$$=x = \frac{-8\sqrt{2}}{8} \tag{7}$$

$$=x=-\sqrt{2}\tag{8}$$

(9)

or

$$=x = \frac{-7 - \sqrt{49 - 40}}{2\sqrt{2}}\tag{10}$$

$$= x = \frac{-7 - \sqrt{49 - 40}}{2\sqrt{2}}$$

$$= x = \frac{-7 - \sqrt{9}}{2\sqrt{2}}$$

$$= x = \frac{-10}{2\sqrt{2}}$$

$$= x = \frac{-10 \times 2\sqrt{2}}{2\sqrt{2} \times 2\sqrt{2}}$$

$$= x = \frac{-20\sqrt{2}}{8}$$

$$= x = \frac{-5}{\sqrt{2}}$$
(10)
$$(11)$$

$$(12)$$

$$(13)$$

$$= x = \frac{-10}{2\sqrt{2}} \tag{12}$$

$$=x = \frac{-10 \times 2\sqrt{2}}{2\sqrt{2} \times 2\sqrt{2}}\tag{13}$$

$$= x = \frac{-20\sqrt{2}}{8} \tag{14}$$

$$=x = \frac{-5}{\sqrt{2}}\tag{15}$$