

$$2\text{(iii)} \quad 3\sqrt{2}x^2 - 5x - \sqrt{2} = 0$$

$$\Rightarrow 3\sqrt{2}x^2 - 6x + x - \sqrt{2} = 0$$

$$\Rightarrow 3\sqrt{2}x(x - \sqrt{2}) + 1(x - \sqrt{2}) = 0$$

$$\Rightarrow (x - \sqrt{2})(3\sqrt{2} + 1) = 0$$

$$\Rightarrow x - \sqrt{2} = 0, \quad 3\sqrt{2}x + 1 = 0$$

$$\Rightarrow x = \sqrt{2}, \quad x = -\frac{1}{3\sqrt{2}}$$

$$= -\frac{\sqrt{2}}{6}$$

$$2\text{(iv)} \quad 3x^2 + 5\sqrt{5}x - 10 = 0$$

$$\Rightarrow 3x^2 + 6\sqrt{5}x - \sqrt{5}x - 10 = 0$$

$$\Rightarrow 3x(x + 2\sqrt{5}) - \sqrt{5}(x + 2\sqrt{5}) = 0$$

$$\Rightarrow (x + 2\sqrt{5})(3x - \sqrt{5}) = 0$$

$$\Rightarrow x + 2\sqrt{5} = 0, \quad 3x - \sqrt{5} = 0$$

$$\Rightarrow x = -2\sqrt{5}, \quad x = \frac{\sqrt{5}}{3}$$

$$2\text{(v)} \quad 21x^2 - 2x + \frac{1}{21} = 0$$

$$(x21) \quad 441x^2 - 42x + 1 = 0$$

$$\Rightarrow 441x^2 - 21x - 21x + 1 = 0$$

$$\Rightarrow 21x(21x - 1) - 1(21x - 1) = 0$$

$$\Rightarrow (21x - 1)(21x - 1) = 0$$

$$\Rightarrow 21x - 1 = 0, \quad 21x - 1 = 0$$

$$\Rightarrow x = \frac{1}{21}, \quad x = \frac{1}{21}$$