

Question 2

$$D^{ii}) \quad x^2 + 13x + 22 = 0$$

$$\begin{array}{r} 22 \\ 1 \overline{) 22} \\ \underline{22} \\ 0 \end{array} \leftarrow (15)$$

$$(x+11)(x+2) \quad x^2 + 2x + 11x + 22 \checkmark$$

$$x + 11 = 0$$

$$x + 2 = 0$$

$$\boxed{x = -11} \quad \boxed{x = -2} \quad \leftarrow \text{Answers}$$

$$D^{iii}) \quad x^2 - 100 = 0$$

$$\sqrt{100} = 10$$

$$(x+10)(x-10) \quad -50 + \text{and} -$$

$$\boxed{x = \pm 10} \quad \leftarrow \text{Answer}$$

$$D^{iv}) \quad 2x^2 + 7x + 5 = 0$$

$$2 \times 5 = 10$$

$$\begin{array}{r} 10 \\ 1 \overline{) 10} \\ \underline{10} \\ 0 \end{array} \leftarrow \text{Add } (7)$$

$$(2x+2)(2x+5) \quad \text{Reduce}$$

$$\downarrow \div 2$$

$$(x+1)(2x+5) \quad 2x^2 + 5x + 2x + 5 \checkmark$$

$$x + 1 = 0$$

$$2x + 5 = 0$$

$$2x - 5$$

$$\boxed{x = -2.5}$$

$\checkmark$ Answers

$$x = -5/2$$