

$$\text{iii)} \quad \begin{matrix} tr - ty + ur - uy \\ (t+u)(r-y) \end{matrix}$$

$$\text{d)} \quad x^2 + 9x + 8 = 0$$

$$(x+8)(x+1)$$

$$x^2 + x + 8x + 8$$

$$x^2 + 9x + 8 = 0$$

$$\boxed{\begin{matrix} x+8=0 \\ x=-8 \end{matrix}}$$

$$\boxed{\begin{matrix} x+1=0 \\ x=-1 \end{matrix}}$$

$$\text{ii)} \quad 12x^2 - 5x - 3 = 0$$

$$(4x-3)(3x+1) = 0$$

$$4x-3=0 \quad \text{or} \quad 3x+1=0$$

$$x = \frac{3}{4} \quad \text{or} \quad x = -\frac{1}{3}$$

$$\text{iii)} \quad 2x + 17x = -30$$

$$2x^2 + 17x - (-30) = 30 - (-30)$$

$$2x^2 + 17x = 0$$

$$2x + 5 = 0 \quad \text{or} \quad x + 6 = 0$$

$$x = -\frac{5}{2} \quad \text{or} \quad x = -6$$

$$\text{iv)} \quad x^2 - 256 = 0$$

$$x^2 - 256 + 256 = 0 + 256$$