

$$(x - 5)^2 + 2(x - 5) - 35 = 0$$

$$x - 5 = t$$

$$t^2 + 2t - 35 = 0$$

$$D = 4 + 4 \cdot 35 = 144 = 12^2$$

$$t_{1,2} = \frac{-2 \pm 12}{2}$$

$$t_1 = -7 \quad t_2 = 5$$

$$x - 5 = -7 \quad \text{or} \quad x - 5 = 5$$

$$\underline{\mathbf{x = -2 \quad \text{or} \quad x = 10}}$$