

**Condition:**

Solve each quadratic in form equation.

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

4.  $(x - 2)^2 - 3(x - 2) + 2 = 0$

**Solution:**

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

Let  $u = x - 5$

$u^2 + 2u - 35 = 0 \rightarrow (u + 7)(u - 5) = 0 \rightarrow (x - 5 + 7)(x - 5 - 5) = 0$

$(x + 2)(x - 10) = 0$

4:  $(x - 2)^2 - 3(x - 2) + 2 = 0$

$u^2 - 3u + 2 = 0$  Where  $u = x - 2$

$(u - 1)(u - 2) = 0 \rightarrow (x - 2 - 1)(x - 2 - 2) = 0$

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

**Answer:**     **3:  $x_1 = -2, x_2 = 10$ ;**

**4:  $x_1 = 3, x_2 = 4$ .**