

Laberinto cuadrático

$$\underline{-7x^2 + 14x + 21 = 0} \rightarrow$$

$$x^2 - 2x - 3 = 0$$

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

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

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

$$x+1=0$$

$$x-3=0$$

$$x = -1$$

$$x = 3$$

$$x_1 = \frac{7 - 3\sqrt{7}}{7} \quad x_2 = \frac{7 + 3\sqrt{7}}{7} \quad x_1 = 3 \quad x_2 = 4$$

$$\underline{2x^2 - 14x + 24 = 0}$$

$$x^2 - 7x + 12 = 0$$

$$x^2 - 3x - 4x + 12 = 0$$

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

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

$$x-3=0$$

$$x-4=0$$

$$x = 3$$

$$x = 4$$



$$\underline{-7x^2 + 63 = 0}$$

$$x^2 - 9 = 0$$

$$x^2 = 9$$

$$x = 3$$

$$x = -3$$

$$x = 3$$

$$x_1 = -3 \quad x_2 = 3$$

$$\underline{x^2 - 2x + 2 = 0}$$

$$x = \frac{(-2) \pm \sqrt{(-2)^2 - 4 \times 1 \times (-2)}}{2 \times 1}$$

$$x = \frac{2 \pm \sqrt{4+8}}{2}$$

$$x = \frac{2 \pm \sqrt{12}}{2}$$

$$x = \frac{2 \pm 2\sqrt{3}}{2}$$

$$x = 1 + \sqrt{3}$$

$$x = 1 - \sqrt{3}$$

$$x_1 = 1 - \sqrt{3} \quad x_2 = 1 + \sqrt{3}$$

$$\underline{x^2 - 7x - 4 = 0}$$

$$x = \frac{7 \pm \sqrt{49 + 16}}{2}$$

$$x = \frac{7 \pm \sqrt{65}}{2}$$

$$x = \frac{7 + \sqrt{65}}{2}$$

$$x = \frac{7 - \sqrt{65}}{2}$$

$$x_1 = \frac{7 - \sqrt{65}}{2} \quad x_2 = \frac{7 + \sqrt{65}}{2}$$

$$\underline{4x^2 - 24 = 0}$$

$$x^2 - 6 = 0$$

$$x^2 = 6$$

$$x = \sqrt{6}$$

$$x = -\sqrt{6}$$

$$x = \sqrt{6}$$

$$x_1 = -\sqrt{6} \quad x_2 = \sqrt{6}$$

Scribe

$$2x^2 - 6x - 2 = 4x - 3$$

$$2x^2 - 6x - 2 - 4x + 3 = 0$$

$$2x^2 - 10x + 1 = 0$$

$$x = \frac{-(-10) \pm \sqrt{(-10)^2 - 4 \cdot 2 \cdot 1}}{2 \cdot 2}$$

$$x = \frac{10 \pm \sqrt{100 - 8}}{4}$$

$$x = \frac{10 \pm 2\sqrt{23}}{4}$$

$$x = \frac{10 + 2\sqrt{23}}{4}$$

$$x = \frac{10 - 2\sqrt{23}}{4}$$

$$x = \frac{5 + \sqrt{23}}{2}$$

$$x = \frac{5 - \sqrt{23}}{2}$$

$$x_1 = \frac{5 - \sqrt{23}}{2} \quad x_2 = \frac{5 + \sqrt{23}}{2} \quad | \quad x_1 = \frac{1 - \sqrt{29}}{4} \quad x_2 = \frac{1 + \sqrt{29}}{4}$$

$$-14x^2 + 4x + 14 = -6x^2$$

$$-8x^2 + 4x + 14 = 0$$

$$4x^2 - 2x - 7 = 0$$

$$x = \frac{-(-2) \pm \sqrt{(-2)^2 - 4 \cdot 4 \cdot (-7)}}{2 \cdot 4}$$

$$x = \frac{-(-2) \pm \sqrt{4 + 112}}{2 \cdot 4}$$

$$x = \frac{2 \pm \sqrt{116}}{8}$$

$$x = \frac{2 \pm \sqrt{116}}{8}$$

$$x = \frac{2 \pm 2\sqrt{29}}{8}$$

$$x = \frac{2 \pm 2\sqrt{29}}{8}$$