

6/2/25  
Α6κ 1 6ελ 93.

$$\underline{2x^2 - 5x + 3 = 0}$$

$$a = 2$$

$$b = -5$$

$$\Delta = b^2 - 4ac = (-5)^2 - 4 \cdot 2 \cdot 3 = 25 - 24 = 1$$

$$c = 3$$

$$\Delta > 0 \quad 2 \text{ ρίζες.}$$

$$x = \frac{-b \pm \sqrt{\Delta}}{2a} = \frac{5 \pm \sqrt{1}}{2 \cdot 2} = \frac{5 \pm 1}{4}$$

$$\rightarrow \frac{5+1}{4} = \frac{6}{4} = \frac{3}{2}$$

$$\rightarrow \frac{5-1}{4} = \frac{4}{4} = 1$$

$$\underline{x^2 - 6x + 9 = 0}$$

$$a = 1$$

$$b = -6$$

$$\Delta = b^2 - 4ac = (-6)^2 - 4 \cdot 1 \cdot 9 = 36 - 36 = 0 \quad \text{Μία ρίζα}$$

$$c = 9$$

$$x = \frac{-b \pm \sqrt{\Delta}}{2a} = \frac{6 \pm \sqrt{0}}{2 \cdot 1} = \frac{6 \pm 0}{2} = 3$$

$$\underline{3x^2 + 4x + 2 = 0}$$

$$a = 3$$

$$\Delta = b^2 - 4ac = 4^2 - 4 \cdot 3 \cdot 2 = 16 - 24 = -8$$

$$b = 4$$

$$\Delta < 0 \quad \text{αδύνατη}$$

$$\underline{\pi x}$$

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

$$\text{ζέρω ότι } x^2 = |x|^2$$

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

$$a = 1$$

$$\Delta = b^2 - 4ac = (-2)^2 - 4 \cdot 1 \cdot (-3)$$

$$b = -2$$

$$\Delta = 4 + 12 = 16$$

$$c = -3$$

$$|x| = \frac{-b \pm \sqrt{\Delta}}{2a} = \frac{2 \pm \sqrt{16}}{2 \cdot 1} = \frac{2 \pm 4}{2}$$

$$|x| = \rightarrow \frac{2+4}{2} = \frac{6}{2} = 3$$

$$\rightarrow \frac{2-4}{2} = \frac{-2}{2} = -1$$

$$|x| = 3 \quad \text{ή} \quad |x| = -1$$

$$x = 3 \quad \text{ή} \quad x = -3$$

$$\rightarrow \text{αδύνατη}$$

Ηλw Α6κ 11 α) 6ελ 94