

$$\frac{5/12/24}{-4|x^2 + 3x + 1 = 0}$$

$$\begin{array}{l|l} a = -4 & \Delta = b^2 - 4ac = 3^2 - 4 \cdot (-4) \cdot 1 = 9 + 16 = 25 \\ b = 3 & \Delta = 25 > 0 \text{ 8 2 zeros.} \\ c = 1 & \\ -b = -3 & \end{array} \quad \begin{array}{l} x_{1,2} = \frac{-b \pm \sqrt{\Delta}}{2a} = \frac{-3 \pm \sqrt{25}}{2 \cdot (-4)} = \frac{-3 \pm 5}{-8} \\ \begin{array}{l} \nearrow \frac{-3+5}{-8} = \frac{2}{-8} = -\frac{1}{4} \\ \searrow \frac{-3-5}{-8} = \frac{-8}{-8} = 1 \end{array} \end{array}$$

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

$$\begin{array}{l|l} a = 1 & \Delta = b^2 - 4ac = (-1)^2 - 4 \cdot 1 \cdot (-2) = +1 + 8 = 9 \\ b = -1 & \Delta = 9 > 0 \text{ 8 2 zeros.} \\ c = -2 & \\ -b = 1 & \end{array} \quad \begin{array}{l} x = \frac{-b \pm \sqrt{\Delta}}{2a} = \frac{1 \pm \sqrt{9}}{2 \cdot 1} = \frac{1 \pm 3}{2} \\ \begin{array}{l} \nearrow \frac{1+3}{2} = \frac{4}{2} = 2 \\ \searrow \frac{1-3}{2} = \frac{-2}{2} = -1 \end{array} \end{array}$$

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

$$\begin{array}{l|l} a = 1 & \Delta = b^2 - 4ac = 3^2 - 4 \cdot 1 \cdot 2 = 9 - 8 = 1 \\ b = 3 & \Delta = 1 > 0 \text{ 8 2 zeros} \\ c = 2 & \\ -b = -3 & \end{array} \quad \begin{array}{l} x = \frac{-b \pm \sqrt{\Delta}}{2a} = \frac{-3 \pm \sqrt{1}}{2 \cdot 1} = \frac{-3 \pm 1}{2} \\ \begin{array}{l} \nearrow \frac{-3+1}{2} = \frac{-2}{2} = -1 \\ \searrow \frac{-3-1}{2} = \frac{-4}{2} = -2 \end{array} \end{array}$$

Hw

$$x^2 + 4x - 21 = 0$$

$$x^2 - 5x - 14 = 0$$