

النيا معيالي

① c) $q_N^p - \Delta_N - q = 0$

$$x^2 - 2x - 18 = 0 \rightarrow (x-9)(x+8) = 0$$

$\begin{array}{c} 2 \\ 1 \end{array} \mid \begin{array}{c} 2 \\ 1 \end{array}$

$$b) \quad x^{\mu} - \Lambda x^{\mu} = 0 \rightarrow x^{\mu} - \Lambda x^{\mu} - 9 = 0$$

$$\rightarrow (n-9)(n+1) = 0$$

$\downarrow$
 $4 \rightarrow \mu$

$$\partial_{\mu} x^{\mu} - \partial_{\mu} x^{\mu} = 0 \rightarrow x^{\mu} - x^{\mu} - 1 = 0$$

$$\rightarrow (n-9)(n+1) = 0$$

$\frac{1}{2}$

$$\Rightarrow \gamma^P - \Delta x - 1P = 0 \rightarrow \gamma^P - \Delta x - 2F = 0$$

$$(n-1)(x+r)=0$$

[illegible]

⑤ cii) $x^2 - 2x - 15 = 0 \rightarrow (x-5)(x+3) = 0$ $x = \begin{matrix} 5 \\ -3 \end{matrix}$

$$\rightarrow \frac{1}{r} + \frac{1}{r} + \frac{1}{r} = 0 \rightarrow \frac{-b \pm \sqrt{\Delta}}{r_a} = \frac{-2 \pm \sqrt{4 - 4 \cdot 1 \cdot 1}}{1}$$

$$\frac{1}{\sqrt{2}} = \frac{1}{\sqrt{2}}$$

$$\frac{1}{2} = \frac{1}{2}$$

$$\begin{aligned}
 \text{ج) } x^2 + 2x + 3 &= 0 \quad \Delta = b^2 - 4ac = 4 - 12 < 0 \rightarrow \text{لا حلا} \\
 \text{د) } 3x^2 + 3x - 2 &= 0 \quad \frac{-3 \pm \sqrt{9 + 24}}{6} < \frac{-3 - \sqrt{33}}{6} \\
 &\quad \frac{-3 + \sqrt{33}}{6}
 \end{aligned}$$

$$\text{و) } A \times B = \{(1, 2)(1, 3)(2, 2)(2, 3)(3, 2)(3, 3)\}$$

$$B \times B = \{(1, 2)(2, 3)(3, 2)(3, 3)\}$$

$$\underbrace{A \times B - B^2}_{\rightarrow} = \{(1, 2)(1, 3)\}$$

$$\begin{aligned}
 \text{ز) } m^2 = m + 2 &\rightarrow m^2 - m - 2 = 0 \rightarrow (m - 2)(m + 1) = 0 \\
 (2, 1)(2, 3) &\xrightarrow{r=m} \rightarrow m = -1 \quad m = \begin{matrix} 2 \\ -1 \end{matrix}
 \end{aligned}$$

$$\text{ح) } m^2 - m - 2 = 0 \rightarrow (m - 2)(m + 1) = 0 \quad m < \begin{matrix} 2 \\ -1 \end{matrix}$$

$$\begin{aligned}
 m = 2 &\rightarrow (2, 1)(2, 3) \\
 m = -1 &\rightarrow (-1, 2)(-1, 3)
 \end{aligned}
 \quad \left. \begin{array}{l} \\ \end{array} \right\} \rightarrow \text{لا حلا}$$

$$\text{ط) } a^2 = 2a - 2 \rightarrow a^2 - 2a + 2 = 0 \quad (a - 2)(a - 1)$$

$$\xrightarrow{a=1} (1, 1) \text{ و } (1, 2) \rightarrow \boxed{a=2}$$

$$\begin{aligned}
 \text{ث) } x^2 - 1 &\xrightarrow{x=1} 0 \\
 a + b &\xrightarrow{x=1} a + b \rightarrow a + b = 0
 \end{aligned}$$

$$\xrightarrow{x=2} 2a + b = 1 \rightarrow a = 1, b = -1 \quad \boxed{a \times b = -1}$$

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ارداد
 یخشینه

$$\textcircled{v} 2K - 3 = 4 - 3K \rightarrow 5K = 7 \rightarrow K = \frac{7}{5}$$

$$\textcircled{a} \text{ ان } y(y^2 - 4) = (x-1)(x-4) \xrightarrow{x=1} y(y^2 - 4) = 0$$

$x=1 \Rightarrow y = \begin{cases} 0 \\ \sqrt{4} \\ -\sqrt{4} \end{cases}$

$$\text{ب) } |x| + |y| = 3 \xrightarrow{x=0} |y| = 3 \rightarrow y = \pm 3$$

$x = \frac{\pi}{2}$

$$\text{ج) } |y| = \sqrt{1 - \cos x} \xrightarrow{\cos x = \frac{1}{2}} |y| = \sqrt{\frac{1}{2}} \Rightarrow y = \pm \frac{1}{\sqrt{2}}$$

$x = \frac{\pi}{3}$

$$\text{د) } y^2 + (x+1)^2 = 0 \rightarrow \begin{pmatrix} -1 \\ 0 \end{pmatrix}$$

نقطه

$$\textcircled{4} \sqrt[3]{y} + x^2 = 2x - 2 \rightarrow \sqrt[3]{y} = 2x - 2 - x^2$$

ترانه $y = (2x - 2 - x^2)^3 \rightarrow y_1 = y_2$

$$\text{ب) } y_1^3 + 2y_1 = 2x \quad \left\{ \begin{array}{l} y_1^3 - y_2^3 + 2(y_1 - y_2) = 0 \\ y_1^3 + 2y_1 = 2x \end{array} \right.$$

$$(y_1 - y_2)(y_1^2 + y_1 y_2 + y_2^2 + 2) = 0$$

$$\text{ب) } y_1 = y_2 = 0 \rightarrow y_1 = y_2$$

نقطه

$$\text{ان } x \sin y = y \sin x \xrightarrow{x=0} 0 \sin y = y \sin 0$$

نقطه

$$\therefore \sqrt{\frac{3}{y}} = n, \sqrt{\frac{5}{x}} = \frac{1}{n}$$

$$n + \frac{1}{n} = r \rightarrow n^r + 1 - r n = 0$$

$$(n-1)^r = 0 \rightarrow n=1 \rightarrow \sqrt{\frac{x}{y}} = 1$$

→ $\frac{dx}{dy} = 1 \Rightarrow x = y$ (تقاطع)