

الف) $4x^2 - 5x - 9 = 0 \rightarrow x^2 - 5x - 9 = 0$ $(x-9)(x+4) \rightarrow x = 9/4$ $x = -4/9$
 $n = 9/4$ $n = -4/9$
 ب) $3x^2 - 1x - 3 = 0 \rightarrow x^2 - 1x - 9 = 0$ $(x-9)(x+1)$
 $x = 9/4 = 3/2$ $x = -1/3$
 ج) $x^2 - 4x - 12 = 0 \rightarrow (x-6)(x+2) \rightarrow x = 6/2 = 3$ $x = -2/2 = -1$
 د) $x^2 - 5x + 24 = 0 \rightarrow (x-1)(x+3) \rightarrow x = 1/4 = 1/4$ $x = -3/4$

الف) $(x-7)(x+2) \rightarrow x = 7$ $x = -2$
 ب) $\Delta = 25 - 4(4) = 1$ $x = \frac{-5 \pm 1}{2} = -\frac{6}{2} = -3$ و -1
 ج) $\Delta = 4 - 4(3) < 0$ ریشه ندارد

د) $9 - 4(-9) = 9 + 36 = \sqrt{45} = 3\sqrt{5}$ $x = \frac{-3 \pm \sqrt{45}}{4} \rightarrow x = \frac{-3 + \sqrt{45}}{4}$ و $x = \frac{-3 - \sqrt{45}}{4}$

$A \times B - B^2 =$ $B = \{2, 3\}$ $B = \{2, 3\}$

$\{(1, 2), (1, 3), (2, 2), (2, 3), (3, 2), (3, 3)\} - \{(2, 2), (2, 3), (3, 2), (3, 3)\}$
 $\Rightarrow \{(1, 2), (1, 3)\}$

الف) $f(m) = 7$ $m^2 = m + 2 \rightarrow m^2 - m - 2 = 0$ $(m-2)(m+1) \rightarrow m = 2$ و $m = -1$
 له زیر این تابع است چون هم $m = 2$ و $m = -1$ در m است

ب) $m^2 = m + 2$ $m = 2 \Rightarrow (2, 1) (2, 4) \times$
 $m = -1 \Rightarrow (-1, 4) (-1, 3) \times$
 $m = 2 \rightarrow$ غلط
 $m = -1 \rightarrow$ غلط
 $\Rightarrow$ هیچ جوابی ندارد

$a^2 = 3a - 1 \Rightarrow a = 1 \times \rightarrow (1, 1) (1, 5)$
 $a^2 - 3a + 2 = 0$ $\Rightarrow a = 2$ و $a = 1$
 $(a-2)(a-1)$ $\Rightarrow a = 2$ و $a = 1$
 $a = 2$ $a = 1$

$$\begin{aligned}
 x=1 &\rightarrow 0=(a+b)x^2 \rightarrow ra+rb=0 \\
 x=r &\rightarrow \lambda=r a+b \\
 rb &= b-\lambda \\
 b &=-\lambda \quad a=\lambda \\
 a \times b &= -\lambda^2
 \end{aligned}
 \left. \begin{aligned}
 (4) \\
 (5) \quad r^2-r^3 = \varepsilon - r^3 \\
 \text{اذ } r=1 \\
 r^2 = 1/5
 \end{aligned} \right\}$$

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$$\begin{aligned}
 3) \quad y^r + n^r + r n + 1 &= 0 \\
 y^r + (n+1)^r &= 0 \\
 \text{نقطه} \\
 \text{نقطه} \\
 \text{نقطه}
 \end{aligned}
 \quad
 \begin{aligned}
 \text{ب) } y(y^r - a) &= 0 \rightarrow y=0 \quad y^r=a \\
 &\quad y = \pm \sqrt[r]{a} \\
 \text{ج) } 1 - \cos n &\rightarrow 0 \text{ مبر } \\
 -1 \leq \cos \leq 1 \\
 n=90^\circ \rightarrow |y|=1 \rightarrow y = \pm 1
 \end{aligned}$$

A

$$\begin{aligned}
 \text{الف) } \sqrt[r]{y} + n^r &= r n - r \rightarrow \sqrt[r]{y} = -(n^r - r n + r) \\
 \sqrt[r]{y_1} &= -n_1^r + r n_1 - r \quad n_1 = n r \\
 \sqrt[r]{y_2} &= -n_2^r + r n_2 - r \\
 \Rightarrow \sqrt[r]{y_1} &= \sqrt[r]{y_2} \rightarrow y_1 = y_2 \quad \checkmark \\
 \Delta &= y_1^r - \varepsilon (y_1^r + r) = -r y_1^r - \lambda \\
 \Delta < 0 &\text{ مع } \\
 \text{این عبارت هیچگاه منفی نشود} \\
 (y_1 - y_2)(y_1^r + y_1^r + y_1 y_2 + r) &= 0 \\
 \Rightarrow (y_1 - y_2)(y_1^r + y_1^r + y_1 y_2 + r) &= 0 \\
 (y_1 - y_2)(y_1^r + y_1^r + y_1 y_2 + r) + r(y_1 - y_2) &= 0 \\
 \Rightarrow (y_1 - y_2)(y_1^r + y_1^r + y_1 y_2 + r + r) &= 0 \\
 \Rightarrow (y_1 - y_2)(y_1^r + y_1^r + y_1 y_2 + 2r) &= 0 \\
 \Rightarrow y_1 = y_2 \quad \text{باید} \\
 \text{منشور} \\
 \text{تابع هست}
 \end{aligned}$$

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$$\begin{aligned}
 \text{الف) } n \sin y &= y \sin n \\
 n=0 &\rightarrow 0 = y \times \frac{\sin 0}{0} \rightarrow y = \text{مقادیر متغایر} \\
 &\quad \text{بار}
 \end{aligned}$$

تابع

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$$\begin{aligned}
 \text{ب) } \sqrt{\frac{x}{y}} + \sqrt{\frac{y}{x}} &= r \\
 \frac{x}{y} + \frac{y}{x} + 2\sqrt{1} &= \varepsilon \rightarrow \frac{x^2 + y^2}{xy} = r \rightarrow x^2 + y^2 = rxy \\
 x^2 + y^2 - rxy &= 0 \rightarrow (x-y)^2 = 0 \quad \checkmark \\
 x &= y
 \end{aligned}$$

تابع

n=y