

نام و نام خانوادگی: نام: پاسنامه تشریحی تکلیف شماره ① کلاس: یازدهم ریاضی - B

الف) $4x^2 - 5x - 6 = 0 \rightarrow x^2 - 5x - 36 = 0 \rightarrow (x-9)(x+4)$ $\begin{cases} x_1 = 9 \\ x_2 = -4 \end{cases}$

ب) $3x^2 - 8x - 3 = 0 \rightarrow x^2 - 8x - 9 = 0 \rightarrow (x-9)(x+1)$ $\begin{cases} x_1 = 9 \\ x_2 = -1 \end{cases}$

ج) $4x^2 - 4x - 3 = 0 \rightarrow x^2 - 4x - 12 = 0 \rightarrow (x-6)(x+2)$ $\begin{cases} x_1 = 6 \\ x_2 = -2 \end{cases}$

د) $2x^2 - 5x - 12 = 0 \rightarrow x^2 - 5x - 24 = 0 \rightarrow (x-8)(x+3)$ $\begin{cases} x_1 = 8 \\ x_2 = -3 \end{cases}$

الف) $x^2 - 5x - 14 = 0 \rightarrow (x-7)(x+2)$ $\begin{cases} x_1 = 7 \\ x_2 = -2 \end{cases}$

ب) $2x^2 + 5x + 3 = 0 \rightarrow x^2 + 5x + 6 = 0 \rightarrow (x+3)(x+2)$ $\begin{cases} x_1 = -3 \\ x_2 = -2 \end{cases}$

ج) $x^2 + 2x + 3 = 0 \rightarrow \Delta < 0$ $b^2 - 4ac = 4 - 12 = -8$

د) $3x^2 + 3x - 1 = 0 \rightarrow \Delta = 33$ $x_{1,2} = \frac{-3 \pm \sqrt{33}}{6}$

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

$B^T = \{(2,2)(2,3)(3,2)(3,3)\}$ $A \cap B = B^T = \{(1,2)(1,3)\}$

الف) $m^2 - m + 2 = 0 \rightarrow m^2 - m - 2 = 0 \rightarrow (m-2)(m+1)$ $\begin{cases} x_1 = 2 \\ x_2 = -1 \end{cases}$

ب) $m^2 - m + 2 = 0 \rightarrow \begin{cases} +2 \rightarrow m_1 \\ -1 \rightarrow m_2 \end{cases} \rightarrow \begin{cases} (2,1)(2,4) \\ (-1,3)(-1,4) \end{cases}$

$a^2 - 3a - 2 = 0 \rightarrow a^2 - 3a + 2 = 0 \rightarrow (a-2)(a-1)$ $\begin{cases} (2,1)(2,4) \\ (-1,3)(-1,4) \end{cases}$

$a = 2$

$$\begin{aligned}
 x_1 &\rightarrow 1-1, 0 \\
 a+b &= 0 \\
 x_1 &\rightarrow x_1 \wedge \\
 &\quad 2a-b, \wedge
 \end{aligned}
 \quad
 \left\{
 \begin{aligned}
 a-b \\
 2a-b, \wedge
 \end{aligned}
 \right.
 \rightarrow
 \begin{aligned}
 -2b+b, \wedge \\
 -b, \wedge
 \end{aligned}$$

$$\begin{aligned}
 b &= -\wedge \\
 a &= \wedge
 \end{aligned}$$

$$axb = \wedge x - \wedge, -2f$$

$$x, k \rightarrow 2k-3 = k-3k$$

$$\begin{aligned}
 &\partial k, v \\
 &\quad k, \frac{v}{\partial}
 \end{aligned}$$

$$\begin{aligned}
 &y^3 - 4y^2 - 4x + 3 \xrightarrow{x_1} y^3 - 4y, 1-4+3 = y^3 - 4y, 0 \\
 &\text{الف) } y^3 - 4y^2 - 4x + 3 \xrightarrow{x_1} y^3 - 4y, 1-4+3 = y^3 - 4y, 0
 \end{aligned}$$

تابع نیست $y = \pm \sqrt{4}$ $y_1 = 0$

$$b) |y| = 3 - |x| \rightarrow y_1 \pm (3 - |x|) \xrightarrow{x_1} y_1 \pm 3$$

$$c) |y| = \sqrt{1 - \cos x} \rightarrow y_1 \pm \sqrt{1 - \cos x}$$

$$d) y^2 + (x^2 + 2x + 1), 0 \rightarrow y^2 + (x+1)^2, 0 \xrightarrow{(-1,0)}$$

$$\begin{aligned}
 &\text{الف) } \sqrt[3]{y_1 + x_1^2} - 2x_1 - 2 \xrightarrow{x_1, x_2} \sqrt[3]{y_1} - \sqrt[3]{y_2} \\
 &\quad \sqrt[3]{y_2} + 2x_2^2 - 2x_2 - 2 \xrightarrow{\frac{2x_2^2 + x_2^2}{2x_1, 2x_2}} y_1, y_2
 \end{aligned}$$

تابع هست $\checkmark$

$$\begin{aligned}
 &b) y^3 - 2y_1 - 2x_1 \xrightarrow{x_1, x_2} y_1^3 - 2y_1 - 2y_2 + 2y_2 \\
 &\quad y_2^3 + 2y_2 - 2x_2 \xrightarrow{\quad} y_1^3 - y_2^3 + 2(y_1 - y_2), 0
 \end{aligned}$$

تابع هست $\checkmark$ $(y_1 - y_2)(y_1^2 + y_1 y_2 + y_2^2 + 2), 0$

$$\text{الف) } x \sin y, y \sin x \xrightarrow{x_1} 0 \sin y, y \sin 0$$

$$\begin{aligned}
 &(0, 1) \\
 &(0, 2) \quad d \neq 2
 \end{aligned}$$

$$\begin{aligned}
 &b) \left(\sqrt{\frac{x}{y}} + \sqrt{\frac{y}{x}} = 2 \right) \times \sqrt{xy} \quad x=y, 2\sqrt{xy} \\
 &\quad \quad \quad x=y - 2\sqrt{xy}, 0 \quad \quad \quad x_1 = x_2 \\
 &\quad \quad \quad (\sqrt{x} - \sqrt{y})^2, 0 \quad \quad \quad \sqrt{x}, \sqrt{y}
 \end{aligned}$$

تابع هست $\checkmark$