

آینت ریشی . برای من عزیزت خالوند . لطیف بفرستم بنوردر 

یازدهم دختره

ریشه فاکتور به ۲ روش روسی

$$[a \times c] \rightarrow x^2 - \omega x - 24 = 0$$

$$x - 9 = 0 \rightarrow x = \frac{9}{1} = \frac{9}{1}$$

$$[4x - 9 - 24] \rightarrow (x - 9)(x + 1) = 0 \quad x + 1 = 0 \rightarrow x = \frac{-1}{1} = -1$$

$$3x^2 - 11x - 2 = 0$$

$$x - 9 = 0 \rightarrow x = \frac{9}{1} = 9$$

$$x^2 - 11x - 2 = 0 \rightarrow (x - 9)(x + 1) = 0 \quad x + 1 = 0 \rightarrow x = \frac{-1}{1} = -1$$

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

$$x - 9 = 0 \rightarrow x = \frac{9}{1} = 9$$

$$x^2 - 4x - 12 = 0 \rightarrow (x - 9)(x + 2) = 0 \rightarrow x + 2 = 0 \rightarrow x = \frac{-2}{1} = -2$$

$$2x^2 - \omega x - 12 = 0 \rightarrow x^2 - \omega x - 12 = 0 \rightarrow (x - 1)(x + 3) = 0$$

$$x - 1 = 0 \rightarrow x = \frac{1}{1} = 1$$

$$x + 3 = 0 \rightarrow x = \frac{-3}{1} = -3$$

$$x^2 - \omega x - 12 = 0 \quad x - 7 = 0 \rightarrow x = 7$$

$$(x - 7)(x + 2) = 0 \quad x + 2 = 0 \rightarrow x = -2$$

$$2x^2 + \omega x + 3 = 0 \quad (x + 2)(x + 3) = 0$$

$$x^2 + \omega x + 4 = 0 \rightarrow x = \frac{-2}{1} = -2 \quad x = \frac{-3}{1} = -3$$

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

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

مغدی آفر
جواب

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

$$A \times B = B^2 \rightarrow \{B \times B \times B\} = 3$$

$$A \times B = (1, 2)(1, 3)(2, 2)(2, 3)(3, 2)(3, 3) =$$

$$B^2 = (1, 2)(1, 3)(2, 2)(2, 3) =$$

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

$$f(x) = \{ (3, m^2), (2, 1), (-2, m), (-2, m), (3, m+2), (m, 4) \} - 4$$

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

$$g(x) = \{ (3, m^2), (2, 1), (m, 4), (3, m+2), (-2, m), (-1, 4) \}$$

$$m^2 = m+2 \rightarrow \begin{matrix} m=2 \\ m=-1 \end{matrix} \quad \text{از این دو کدام تابع نیست}$$

$$f(x) = \{ (1, a^2), (1, 3a-2), (a^2, 3a+2) \} \quad \text{کدام چه مقدار است؟}$$

$$a^2 = 3a-2$$

$$a^2 - 3a + 2 = 0 \rightarrow (a-1)(a-2) = 0 \quad \begin{matrix} a=1 \\ a=2 \end{matrix} \quad \text{کدام تابع نیست}$$

$$1 \times 3 + 2 = 5$$

$$2 \times 3 + 2 = 8$$

$$f(x) = \begin{cases} x^2 - 1 & x \leq 1 \\ ax + b & 1 < x \leq 2 \\ ax^2 & x \geq 2 \end{cases}$$

۲ تدریس
فردی

۴ تابع

$$a \times b = ?$$

$$x^2 - 1 = ax + b \rightarrow 1 - 1 = 0 \rightarrow 0 = a + b \rightarrow \begin{matrix} 2a + b = 1 \\ -a + b = 0 \end{matrix}$$

$$\begin{bmatrix} 2a + b = 1 \\ -a + b = 0 \end{bmatrix} \rightarrow \begin{matrix} 1 = 2a + b \\ a \times b = -1 \end{matrix} \rightarrow \begin{matrix} a = 1 \\ b = -1 \end{matrix}$$

$$f(x) = \begin{cases} 2x - 3 & x \geq k \\ f = 3x & x \leq k \end{cases}$$

۷ تابع؟

$$2k - 3 = 3 - 3k \rightarrow 5k = 6 \rightarrow k = \frac{6}{5}$$

$$y^2 - 4y = x^2 - 4x + 3$$

مثال نشین

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$$\begin{matrix} 1 - 4 + 3 \\ 3 + 3 = 0 \end{matrix}$$

$$x = 1$$

$$y^2 - 4y = 0$$

$$y(y^2 - 4) = 0$$

$$y = 0 \quad y^2 - 4 = 0$$

$$y^2 = 4 \rightarrow y = \pm 2$$

تابع نیست

$x=0$

نشان

آینت رسی

$$|x| + |y| \geq 1 \quad |y| = 1, y = \pm 1 \quad X$$

$$|y| = \sqrt{1 - \cos x} \geq 0 \quad 1 - \cos x \geq 0 \rightarrow \boxed{\cos x \leq 1}$$

نشان $-1 \leq \cos x \leq 1$ است

$$y^2 + x^2 + 2x + 1 = 0 \quad y^2 = 0 \quad y = 0$$

$$y^2 + (x+1)^2 = 0 \quad x+1=0 \rightarrow x=-1$$

$$\sqrt[3]{y} + x^2 = 2x - x^3 \quad (x, 2x, x^3) \text{ و } y_1 = y_2 = (-x^2 + 2x - 1)^3$$

$$y^2 + 2y = \cos x$$

$$\sqrt[3]{y} = \sqrt[3]{-2y + \cos x}$$

$$\sqrt[3]{y} = \sqrt[3]{-2y + \cos x}$$

$$y_1 = \sqrt[3]{-2y + \cos x} = y_2$$

$$(x_1 = x_2) \quad (y_1 = y_2)$$

$$(x-y)^2 = 1 \rightarrow x=y$$

$$x \sin y = y \sin x$$

نشان

$$\frac{x}{y} + \frac{y}{x} \geq 1$$

$$\frac{x^2 + y^2}{xy} \geq 1 \rightarrow x^2 + y^2 \geq xy$$

$$\left(\sqrt{\frac{x}{y}} + \sqrt{\frac{y}{x}} \right)^2 \geq 1 \rightarrow \frac{x}{y} + \frac{y}{x} + \frac{\sqrt{x}}{\sqrt{y}} \frac{\sqrt{y}}{\sqrt{x}} \geq 1$$

$$x^2 + 2x + 1 = 0 \rightarrow b^2 - 4ac \rightarrow 4 - 4 = 0 \rightarrow x = -1$$

$$x^2 + 2x + 1 = 0 \rightarrow x = -1$$

$$\frac{-b \pm \sqrt{b^2 - 4ac}}{2a} \rightarrow \frac{-2 \pm \sqrt{4 - 4}}{2} = -1$$