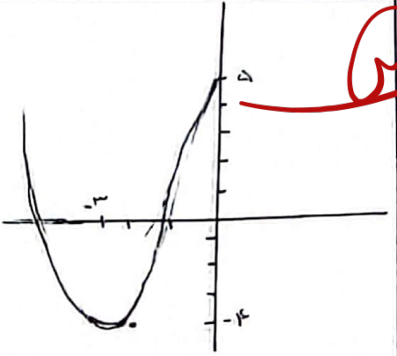


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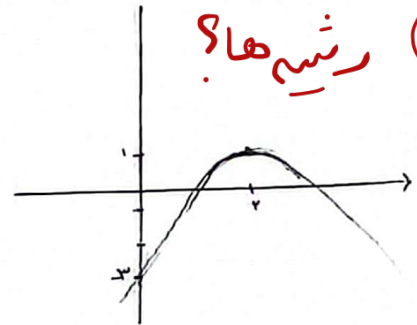
$$\chi_{(s)} = \frac{-b}{\nu_a} = -\frac{\gamma}{\gamma} = -\mu$$

$$g(s) = \frac{-\Delta}{f_a} = \frac{-b^r + f_a c}{f_a} = \frac{-\psi \gamma + \gamma}{f} = -\psi$$


$$\max_{a \in \mathcal{A}}$$

$$\chi_{(s)} = \frac{-b}{Pa} = \frac{-f}{-r} = r$$

$$y_{(s)} = \frac{-\Delta}{\Delta a} = \frac{-b^2 + \Delta c}{\Delta a} = \frac{-14 + 1^2}{-1} = \frac{-13}{-1} = 1$$



الف) $\Delta > 0 \rightarrow b^p - 4ac > 0 \rightarrow 9 - 1a > 0 \rightarrow 9 > 1a \rightarrow \frac{9}{1} > a$

ب) $\Delta = 0 \rightarrow b^2 - 4ac = 0 \rightarrow 9 - 4a = 0 \rightarrow 4a = 9 \quad a = \frac{9}{4}$

ج) $\Delta \{0 \rightarrow b^r - fac \{0 \rightarrow 9 - 1a \{0 \rightarrow 9 \{1a \rightarrow \frac{9}{\lambda} \{a$

$$b) \Delta_{\gamma 0} \rightarrow b^r - \epsilon_{\alpha} c_{\gamma} \rightarrow q - \lambda a_{\gamma} \rightarrow q \gamma, \lambda a \rightarrow \frac{q}{\lambda} \gamma a$$

$$x^4 - x - 1 = 0$$

$$x^4 - x + \frac{3}{x} - 1 = \frac{3}{x}$$

$$x^4 - x + \frac{1}{x} = \frac{3}{x}$$

$$\left(x - \frac{1}{p}\right)^2 = \frac{Q}{p} \rightarrow x = \frac{1 \pm \sqrt{Q}}{p}$$

$$X^T - YX - I = 0$$

$$x^r - rx - 1 + r = r$$

$$(X-1)^4 = 1$$

$$x-1 = \pm \sqrt{4}$$

$$x = 1 \pm \sqrt{F}$$

الف) $\Delta = b^2 - 4ac = 4 + 4 = 8$

$$x = \frac{-b \pm \sqrt{\Delta}}{2a} = \frac{4 \pm 4\sqrt{1}}{2} = 1 \pm \sqrt{1}$$

U) $\Delta = b^r - {}^r_a c = 1 + 19 = 10$

$$x = \frac{-b \pm \sqrt{\Delta}}{p_a} = \frac{-1 \pm \sqrt{10}}{p}$$

$$x^2 - 11x + 28 = 0$$

$$(x-4)(x-7) = 0$$

$$x = 4, 7$$

$$x^2 + 3x - 28 = 0$$

$$(x-4)(x+7) = 0$$

$$x = 4, -7$$

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الف) $x^2 - 12x + 11 = 0$

$$x^2 - 12x + 31 = 0$$

$$(x-1)(x-11) = 0$$

$$x = \frac{11}{11}, 1$$

$$3x^2 - 10x + 11 = 0$$

$$x^2 - 10x + 31 = 0$$

$$(x-3)(x-11) = 0$$

$$x = 1, \frac{11}{3}$$

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الف) $x = 1$

$$x = \frac{c}{a} = \frac{11}{11}$$

$$> b^2 - 4ac = 49 - 144 < 0$$

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ب) $x = -1$

$$x = \frac{-c}{a} = -\frac{11}{11}$$

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ج) $\Delta = b^2 - 4ac = 25 - 11 = 14$

$$x = \frac{-b \pm \sqrt{\Delta}}{2a} = \frac{-5 \pm \sqrt{14}}{2}$$

$$S = \frac{-b}{a} = 5$$

الف) $9 + 4 = 13$

$$P = \frac{c}{a} = -2$$

ب) $2V - 3 \times 3x - 2 = 2V + 11 = 45$

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الف) $\begin{pmatrix} 1 \\ 1 \end{pmatrix} + \begin{pmatrix} 9 \\ 1 \end{pmatrix} = \frac{1 \times 9}{1} + \frac{9 \times 1}{1} = 11 + 9 = 20$

ب) $\begin{pmatrix} 9 \\ 1 \end{pmatrix} + \begin{pmatrix} 1 \\ 1 \end{pmatrix} = \frac{9 \times 1}{1 \times 1} - \frac{1 \times 1}{1} = 9 - 1 = 8$

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