

(10)

β

14

i) $\sqrt{vm^2 - m + 1} \Rightarrow \text{ent} \begin{vmatrix} -\frac{b}{2a} \\ -\frac{a}{2a} \end{vmatrix} \begin{pmatrix} 1 \\ -1 \end{pmatrix}$

ii) $-vm^2 + vm - a \Rightarrow \text{ent} \begin{vmatrix} -\frac{b}{2a} \\ -\frac{a}{2a} \end{vmatrix} \begin{pmatrix} -\frac{1}{2} \\ \frac{1}{2} \end{pmatrix}$

iii) $m^2 - 4m + 1 \rightarrow \begin{array}{ccc|c} m & 1 & -1 & 0 \\ y & -4 & 1 & 1 \end{array}$

ent $\begin{vmatrix} 1 \\ -4 \end{vmatrix}$

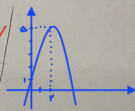
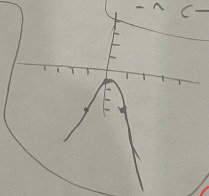
c) $-m^2 + 4m + 1 \rightarrow \begin{array}{ccc|c} m & 1 & -1 & 0 \\ y & 4 & -1 & 1 \end{array}$

Wig: $-2^2 + 4 \cdot 2 + 1 \rightarrow 4x \rightarrow \max \text{ ext}$

$\begin{cases} y_1 = -\frac{b}{2a} = \frac{4}{-2} = -2 \\ y_2 = -f \pm \sqrt{f^2 - 1} = 2 \pm \sqrt{4 - 1} = 2 \pm \sqrt{3} \end{cases}$

$\alpha\beta = -2, \alpha + \beta = 1$

$\begin{cases} \alpha = 2 \\ \beta = -1 \end{cases}$



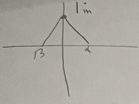
$\Rightarrow -f + k \pm \sqrt{f^2 - 1} = \frac{1}{2}k + \frac{1}{2}\sqrt{4 - 1}$

$k_2 = -\sqrt{3}$

$\sqrt{a} - \sqrt{b} = 1 \Rightarrow \alpha + \beta - \sqrt{\alpha\beta} = 1$

$\Rightarrow \sqrt{m} - \sqrt{m-1} = 1$

$\Rightarrow m \geq 1 \Rightarrow \sqrt{m^2 - m - 1} = 0 \quad \frac{1}{a} = \frac{-1}{\sqrt{m}}$



$$g_n \frac{1}{v} \times (x - \beta) \times m$$

$$\frac{1}{\text{ارتفاع}} = \frac{\sqrt{\Delta}}{|a|}$$

کس قدر سوال با این صورت خواهر
 -w
 (beta, alpha)

$$\frac{\sqrt{\Delta}}{|a|} (m + \frac{1}{v} = \frac{m}{v} \Rightarrow \sqrt{\frac{(m+v)^2 - 2(m)v}{v}} \times m + \frac{1}{v} = \frac{m}{v}$$

$$\sqrt{m^2 + 2m + \frac{1}{v} - \frac{2m}{v}} \times m + \frac{1}{v} = \frac{m}{v} \Rightarrow \sqrt{m^2 - 2m + \frac{1}{v}} \times m + \frac{1}{v} = \frac{m}{v}$$

$$m > \frac{1}{v} \Rightarrow m^2 - 2m + \frac{1}{v} < 0$$

$$m < \frac{1}{v} \Rightarrow m^2 - 2m + \frac{1}{v} > 0$$

$$g = m^2 - 2m + \frac{1}{v} \Rightarrow \frac{m}{v} = -\frac{b}{2a}$$

4

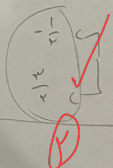
$$\Rightarrow \frac{m}{v} = \frac{1}{v}$$

$$\Rightarrow 0 (m - 1) (m - \frac{1}{v}) = 0 \Rightarrow m = 1 \text{ or } m = \frac{1}{v}$$

$$\Rightarrow m^2 - 2m + \frac{1}{v} < 0 \Rightarrow \Delta < 0$$

$$m = 1 - \frac{1}{v} \Rightarrow m + \frac{1}{v} = 1$$

$$\frac{-A}{2a} = \frac{1}{v} = \frac{1 - 2m}{2} \Rightarrow 1 - 2m = \frac{2}{v} \Rightarrow 2m = 1 - \frac{2}{v} \Rightarrow m = \frac{1}{2} - \frac{1}{v}$$



(1/2) = (1/v) < 1/2 < (1/v)

$$4na^2 - va - 1 = 0 \Rightarrow a^2 - va - 1 = 0 \Rightarrow (a - 1/4)(a + 4) = 0$$

$$\frac{\sqrt{\Delta}}{|a|} = \frac{1}{v} \Rightarrow \sqrt{a^2 + va + 1} = \frac{1}{v}$$

$$\frac{\sqrt{a^2 + va + 1}}{a} = \frac{1}{v} \Rightarrow a - 1 = \frac{1}{v} \Rightarrow a = 1 + \frac{1}{v} \Rightarrow (a - 1)(a - \frac{1}{v}) = 0$$

$$\frac{\sqrt{\Delta}}{|a|} = \frac{1}{v} \Rightarrow \sqrt{a^2 - va + 1} = \frac{1}{v} \Rightarrow a - 1 = \frac{1}{v} \Rightarrow a = 1 + \frac{1}{v}$$

(1/2) < (1/v) < 1/2 < (1/v)

-1

$$\alpha + \beta = -\frac{c}{rwa} \quad , \quad \alpha \beta = \frac{b}{rwa} \Rightarrow rwa\alpha^2 - rwanh = -c \Rightarrow rwa\alpha^2 b = c$$

$$\Rightarrow rwa\alpha^2 = 1 \Rightarrow \alpha = \pm \frac{1}{\sqrt{rwa}} \Rightarrow rwa\alpha b = -c \Rightarrow rwa \cdot \frac{1}{\sqrt{rwa}} \cdot b = -c \Rightarrow h_{2-1}$$

$$b) \alpha \begin{cases} \rightarrow b_{2-1} \times \\ \rightarrow b=1 \checkmark \end{cases} \Rightarrow \alpha = -\frac{1}{\sqrt{rwa}} \cdot \beta = 1$$

UJ) (5)

$$a + b_2 - \frac{b}{a} = \Rightarrow a + b = -a^2 - b^2 + 1 \Rightarrow a^2 + a + b^2 + b - 1 = 0$$

$$\Rightarrow (a^2 + a - 1) + (b^2 + b - 1) = 0 \Rightarrow (a + \frac{1}{2})^2 - \frac{5}{4} + (b + \frac{1}{2})^2 - \frac{5}{4} = 0$$

(1)

$$\Rightarrow \begin{matrix} a & b \\ \left\{ \begin{matrix} \alpha \\ \checkmark \end{matrix} \right. & \left\{ \begin{matrix} -r \\ r \end{matrix} \right. \end{matrix} \quad \frac{a+b_2-r}{r}$$

$$a^2 - \frac{(a^2 + b^2 - 11)x + a + b - 1}{S = \frac{b}{a}} = 0$$

$$\rightarrow \begin{cases} a^2 + b^2 - 11 = \frac{b}{a} \rightarrow S^2 - 11S = \frac{b}{a} & \text{I} \\ a + b - 1 = ab \rightarrow S - 1 = P & \text{II} \end{cases}$$

$$\rightarrow S^2 - 11(S-1) = \frac{b}{a} \rightarrow S^2 - 11S + 11 = \frac{b}{a} \rightarrow (S-11)(S+1) = \frac{b}{a} \rightarrow \begin{cases} S = -1 \times \\ S = 0 \checkmark \end{cases}$$

$$y = -ax^2 + ax + r \rightarrow S(\frac{1}{r}, \frac{a^2 + 11a}{ra})$$

$$\rightarrow r(b(\frac{1}{r}) - b(\frac{1}{r}) - 1) = \frac{a}{r} + r \rightarrow \frac{a}{r} = -r$$

$$y = rba^2 - bx - 1 \rightarrow S(\frac{1}{r}, \frac{b^2 + 11b}{-rb})$$

$$\boxed{a = -r}$$

$$-\frac{a}{r} + \frac{a}{r} + r = \frac{b}{r} - 1 \rightarrow \frac{11}{r} = \frac{b}{r} \rightarrow \boxed{b = -11}$$

$$b - a = -9 - (-11) = 2$$

Ad 2