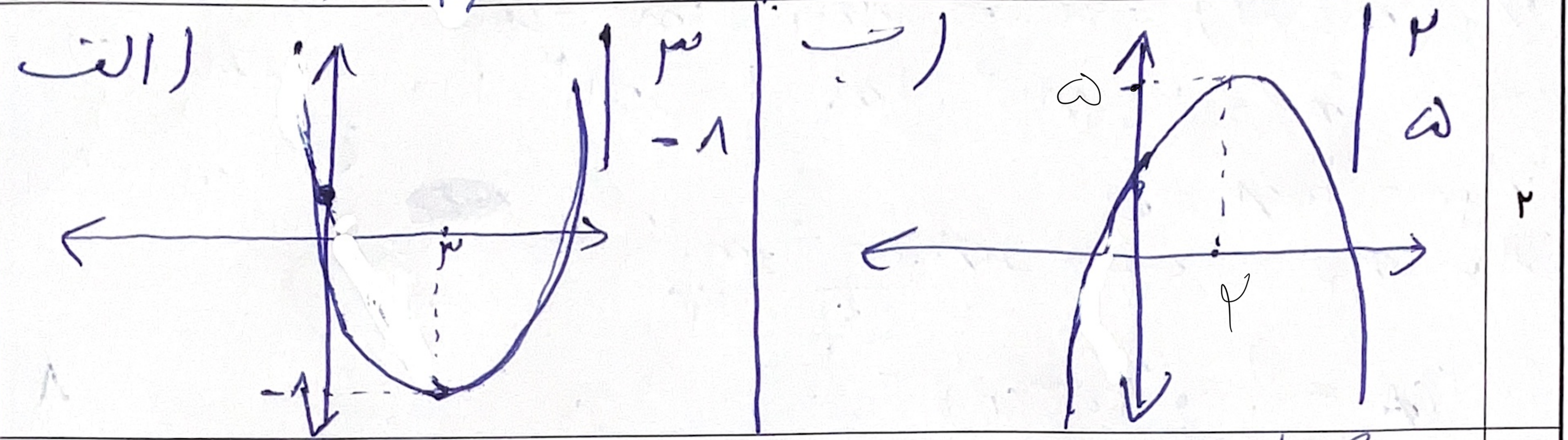


الف) $\frac{-(-4)}{2 \times 2} = 1$ تابع Min دار $\frac{-b}{2a}$
 $2 = 2 + 1 = -1$ y given $x = \frac{-b}{a}$

ب) $\frac{-(3)}{-2 \times 2} = \frac{3}{4}$ تابع Max دار $\frac{-92}{19}$
 $-\frac{11}{19} + \frac{34}{19} - a = \frac{-92}{19}$



$\alpha + \beta = 1 \Rightarrow \alpha = 1 - \beta$

$\alpha\beta = -2 \Rightarrow \beta(1 - \beta) = -2 \Rightarrow \beta - \beta^2 - 2 = 0$

$\Rightarrow (\beta - 2)(\beta + 1) = 0 \Rightarrow \beta = 2 \text{ or } -1 \Rightarrow \alpha = -1 \text{ or } 2$

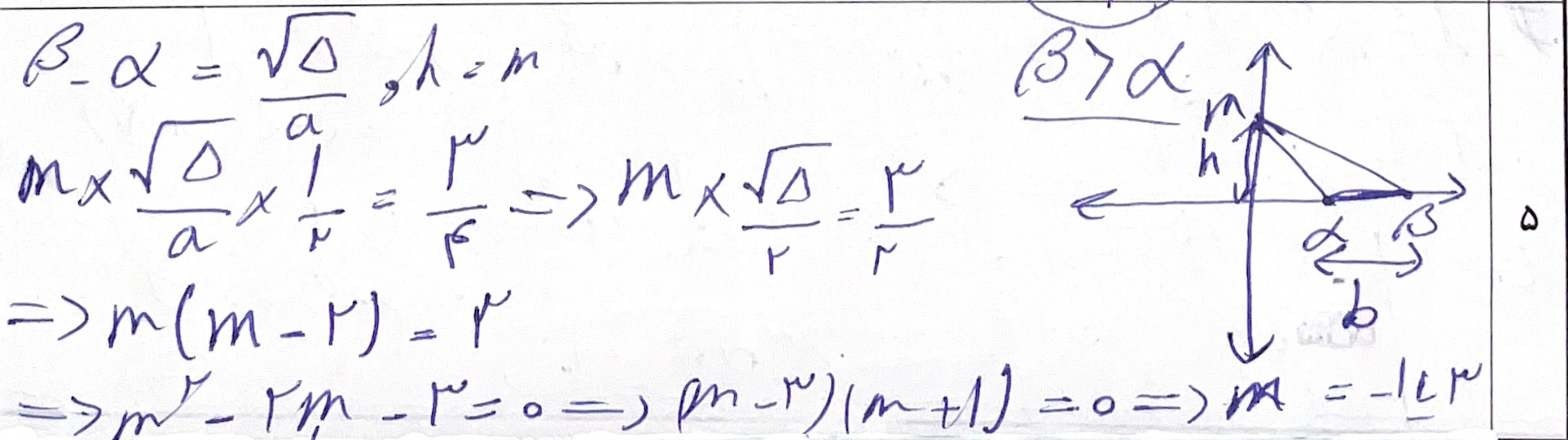
$3\alpha + 4\beta - 11 - 2 = 0$

$1\alpha + 4\beta = 0 \Rightarrow \alpha = -4\beta$

$\sqrt{\alpha} - \sqrt{\beta} = 1 \quad (\alpha, \beta > 0, \alpha > \beta) \Rightarrow \alpha + \beta - 2\sqrt{\alpha\beta} = 1$

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

$\rho(B) = \frac{-1}{2} = \frac{1}{2}$



$x_{(ex4)} = \frac{-b}{2a} = \frac{m}{2} = \frac{-1}{2} \text{ or } \frac{3}{2}$

$$n(\text{ex4}) = \frac{-r}{ra} \text{ give } n = \frac{-r}{ra}$$

$$\frac{q}{ra} - \frac{q}{ra} + a = \frac{V}{\lambda} \implies \frac{q - 1A + ra^r}{ra} = \frac{r, a}{r}$$

$$ra^r - q = r, a$$

$$ra^r - r, a - q = 0 \implies a = \frac{q}{r}, r$$

$$Aa^r - Va - 1A = 0$$

$$a = r$$

$$n_1 + (n_1 + r) = a + 1 \implies r n_1 + r = a + 1 \xrightarrow{\text{I}} a = r$$

$$n_1 (n_1 + r) = a \implies n_1^r + r n_1 = a$$

$$\implies r n_1 + r = n_1^r + r n_1 + 1 \implies n_1^r - 1 = a \implies n_1 = \pm 1$$

$$n_r - \log n + b$$

$$n_r + n_r' = 1 \implies n_r = r, n_r' = s \quad r, s = r, s$$

$$\implies b = r, s$$

$$r, s = r, s$$

$$n(\text{ex4}(A)) = \frac{1}{r}, n(\text{ex4}(B)) = \frac{1}{r}$$

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

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

$$\implies a = -r$$

$$b - a = -9 - (-1r) = 9$$

$$\frac{-9}{r} + \frac{a}{r} + r = \frac{b}{r} - 1$$

$$r, s = -r, b$$

$$b = -9$$

$$P = \alpha/\beta = \beta \implies r \alpha \beta = 1$$

$$\implies \alpha = \pm \frac{1}{\omega}$$

$$Q = \frac{-r}{ra} = \alpha + \beta$$

$$\text{If } \alpha = \frac{+1}{\omega} \implies \frac{-r}{\omega} = \frac{1}{\omega} + \beta \implies \beta = -1$$

$$\implies \beta < \alpha \implies \text{X}$$

$$\text{If } \alpha = \frac{-1}{\omega} \implies \frac{r}{\omega} = \frac{-1}{\omega} + \beta \implies \beta = 1$$

$$\beta > \alpha \implies \text{O}$$

$$\text{ex4} \left| \frac{-r}{ra} = \frac{r}{\omega} \right. \implies y = \frac{q}{a}$$

$$\alpha, \beta = \pm 1$$

$$Q = \alpha + \beta, P = \alpha\beta$$

(10)

$$\alpha^r + \beta^r = S^r - r\alpha\beta = S^r - rP$$

$$n^r - (S^r - rP - 1r) + Q - 1 = 0$$

$$Q = S^r - rP - 1r$$

$$P = Q - 1$$

$$S^r - rQ + r - 1r = Q$$

$$S^r - rQ - 1r = 0$$

$$\implies (Q - a)(Q + r) = 0$$

$$\implies Q = a, Q = -r$$

$$\text{بما أن } \beta, \alpha > 0 \implies \underline{Q = a}$$