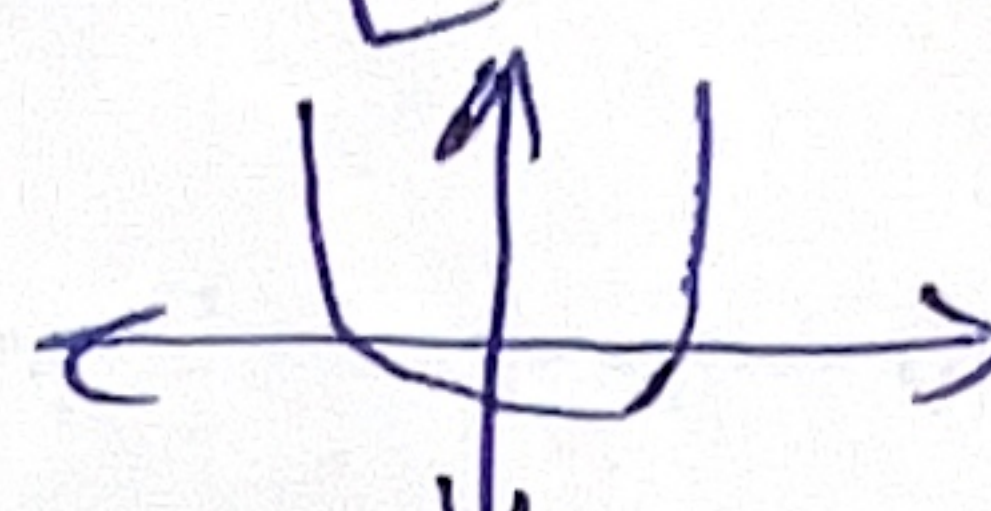
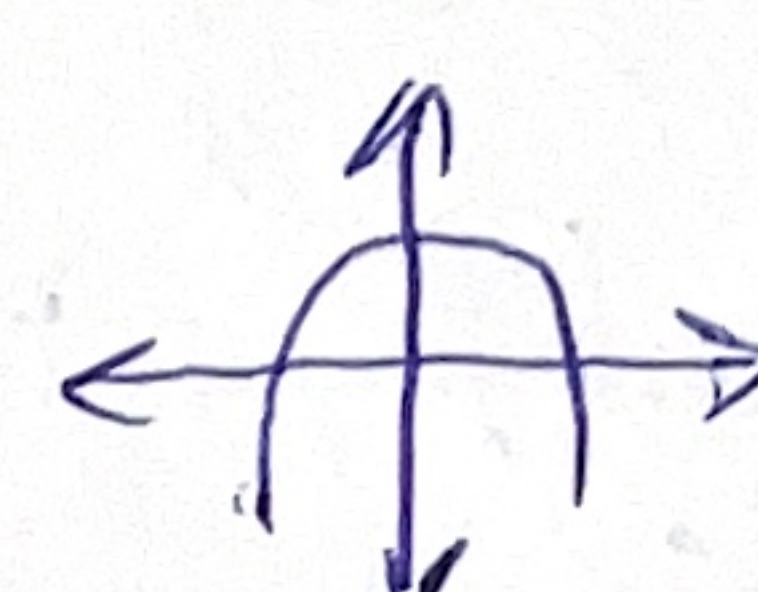


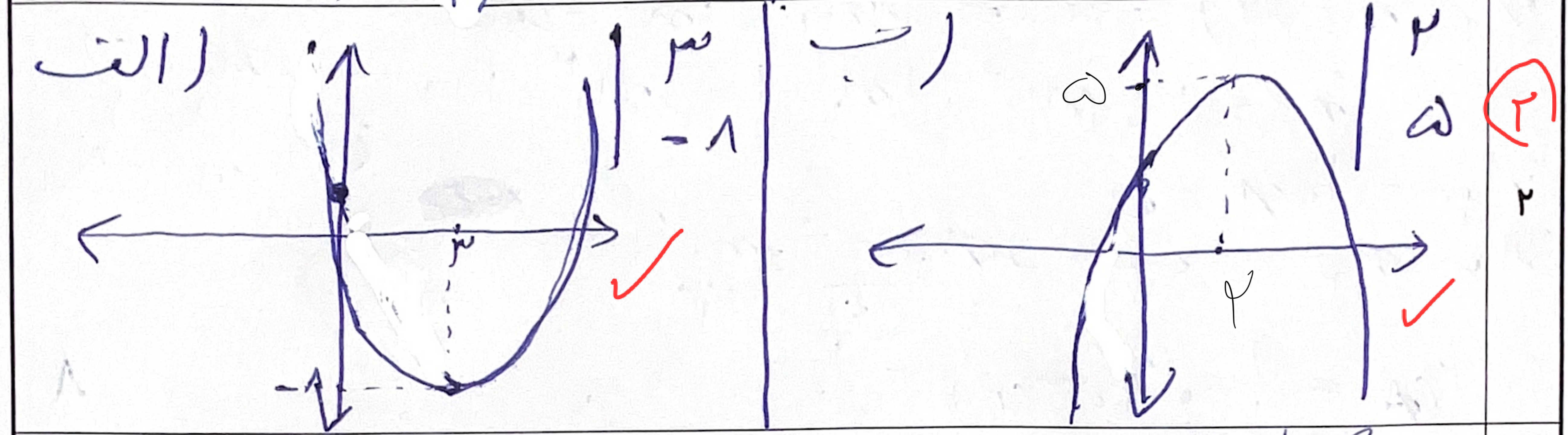
الف) $\left| \frac{-(-4)}{2 \times 2} = 1 \right|$ ✓ $\left| 2 - 2 + 1 = -1 \right|$

ب) $\left| \frac{-(3)}{-2 \times 2} = \frac{3}{4} \right|$ ✓ $\left| -\frac{11}{16} + \frac{39}{16} - 1 = \frac{-9}{16} \right|$

ex 4 $\left| \frac{-b}{2a} \right|$ تابع min دار 

y given $x = \frac{-b}{a}$

تابع max دار 



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

$\alpha \beta = -2 \Rightarrow \beta^2 - \beta - 2 = 0 \Rightarrow \beta = 2 \text{ or } -1 \Rightarrow \alpha = -1 \text{ or } 2$

$32 + 4K - 11 - 2 = 0$

$12 + 4K = 0 \Rightarrow K = -3$ ✓

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

$\sqrt{m} - \sqrt{m} = 0 \Rightarrow \sqrt{m} = 0 \Rightarrow m = 0$

$\Rightarrow \sqrt{m} = 1 \Rightarrow m = 1, P_{(B)} = \frac{-m}{2} = \frac{-1}{2}$ ✓

$\beta - \alpha = \sqrt{\Delta}, h = m$

$m \times \frac{\sqrt{\Delta}}{a} \times \frac{1}{2} = \frac{3}{4} \Rightarrow m \times \frac{\sqrt{\Delta}}{2} = \frac{3}{2}$

$\Rightarrow m(m-2) = 3$

$\Rightarrow m^2 - 2m - 3 = 0 \Rightarrow (m-3)(m+1) = 0 \Rightarrow m = -1 \text{ or } 3$

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

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

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

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

$$ra^r - r, a - q = 0$$

$$\rightarrow a = \frac{q}{r}, r$$

$$a = r \checkmark$$

$$\Delta a^r - ra - 1 = 0$$

$$\Delta a^r - ra - 1 = 0$$

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

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

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

$$\xrightarrow{\text{sub}} n_1 = 1$$

$$n_r - 1, n + b$$

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

$$\implies b = r$$

$$r - r$$

$$= (r) \checkmark$$

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

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

$$\implies a = -1r \checkmark$$

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

$$b - a = -4 - (-1r)$$

$$= 4 \checkmark$$

$$\frac{-4}{r} + \frac{a}{r} + r = \frac{b}{r} - \frac{b}{r} - 1$$

$$\frac{r}{r} = \frac{b - rb}{r}$$

$$r = -rb$$

$$b = -4 \checkmark$$

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

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

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

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

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

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

$$\text{ex} \left| \frac{-r}{\omega \alpha} = \frac{r}{\omega} \right| \rightarrow \alpha, \omega \alpha \checkmark$$

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

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

(10)

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

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

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

$$P = S - 1$$

$$S^r - rS + r - 1r = S$$

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

$$\Rightarrow (S - a)(S + r) = 0$$

$$\Rightarrow S = a, S_r = -r$$

$$\Rightarrow S = a \checkmark$$