

سازمانی

$$x=r \Rightarrow 1-\frac{a}{r}$$

$$x \rightarrow 1 \Rightarrow 1-a$$

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

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$$f'(x) = \frac{a}{x^2}$$

$$\Rightarrow \frac{a}{r} = \frac{a}{x^2}$$

$$\Rightarrow x = \pm \sqrt{r}$$

$$y' = kax - a$$

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$$kax - a = 1 \Rightarrow x = \frac{y}{ka} = \frac{r}{ka} \Rightarrow A = \left(\frac{r}{ka}, \pm \frac{r}{ka} \right)$$

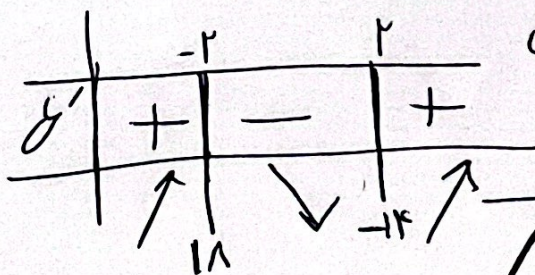
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$$+r = kax^2 - 1 \Rightarrow kax^2 - 1 = r \Rightarrow kax^2 = r+1 \Rightarrow x = \pm \sqrt{\frac{r+1}{ka}}$$

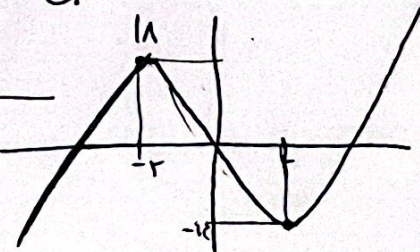
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در این مسئله ما داریم که A یعنی است $a = -\frac{1}{r}$

$$y' = kx^2 - 1$$



$y_{min} = -1$ 3

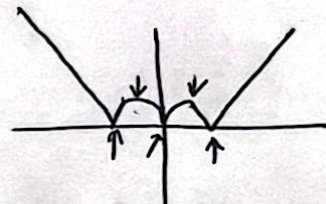
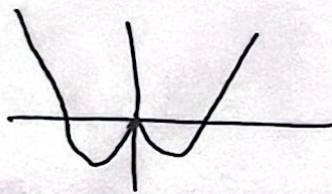
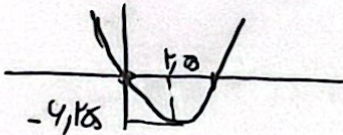


④ چون منحنی لیپسیتز است \leftarrow تنها cut جایی که $\frac{y}{x}$ تغییر می‌کند.

$$y' = 3x^2 + 2ax - 2b \xrightarrow{x=0} \text{circled out} \quad y' = -2b = 0 \Rightarrow \underline{\underline{b=0}}$$

$$\left. \begin{matrix} (0, -4) \\ (-2, 0) \end{matrix} \right\} \Rightarrow \sqrt{15+4} = 2\sqrt{5} \quad \xrightarrow{x=-2} \quad 12 - 4a = 0 \Rightarrow \underline{\underline{a=3}}$$

$$x^2 - \Delta x \quad \longrightarrow \quad x^2 - \Delta |x| \quad \longrightarrow \quad |x^2 - \Delta |x|| \quad \text{⑤}$$

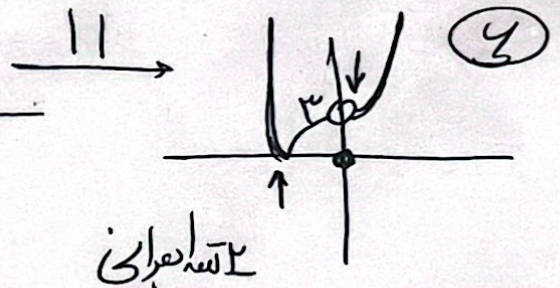
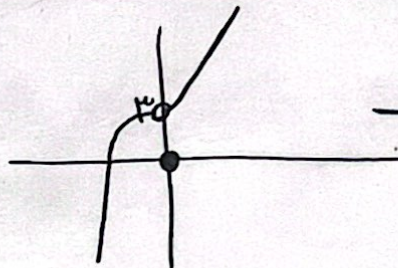


$$m=2 \quad n=4 \quad \frac{n}{m} = \frac{4}{2}$$

$$x > 0 \Rightarrow x^2 + 3$$

$$x < 0 \Rightarrow -x^2 + 3$$

$$x = 0 \Rightarrow 0$$



کتاب ایرانی

$$y' = \frac{m^2 - m - 2}{(m+1)^2} \Rightarrow \frac{m^2 - m - 2}{(m-2)(m+1)} \leq 0$$

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$$\frac{-1 \quad 2}{+ \quad | \quad - \quad | \quad +}$$

[1, 2]

حواص +
برای ایند صفرند

$$| - m \leq 1 \Rightarrow m \geq 0$$

$$m \in [0, 2)$$

$$\frac{x > 0}{x} \Rightarrow \frac{x}{1-x^2} \Rightarrow \frac{x^2 + 1}{(1-x^2)^2}$$

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$$x^2 = 1 \Rightarrow x = \pm 1 \rightarrow \text{تعریفی}$$

$$\frac{x < 0}{x} \Rightarrow \frac{x}{1+x^2} \Rightarrow \frac{1-x^2}{(1+x^2)^2} =$$

$$x^2 = \pm 1 \rightarrow \text{تعریفی}$$