

$$f = \{(1, 4a), (1, a^2+3), (2, 3a)\}$$

$$4a = a^2 + 3$$

$$a^2 - 4a + 3 = 0$$

هر دو وجهی داریم
ب جای a قرار بگذاریم

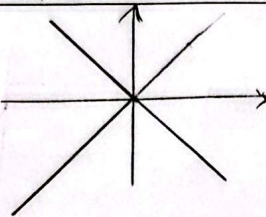
$$a^2 - 4a + 3 = 0$$

ب جای a قرار بگذاریم

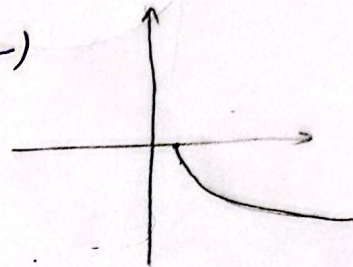
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$$|y| = |x| \text{ (الف)}$$

$$|y| + \sqrt{x-1} = 0 \text{ (ب)}$$



ب)



۲

$$|y-1| = \sqrt{x-2} \text{ (الف)}$$

$$x=2 \Rightarrow |y-1| = 0$$

$$y=1$$

$$\sin^2 x + \cos^2 \frac{y}{2} = 1$$

$$x=3 \Rightarrow \frac{1}{4} + \cos^2 \frac{y}{2} = 1$$

$$y=2$$

$$y^5 - y = \frac{x^2}{2} \quad x=0 \Rightarrow y^5 - y = 0$$

$$y=1, y=0, y=-1$$

$$2xy = x$$

$$x=0 \Rightarrow y=0$$

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$$x^2 + |y-1| = 4x \text{ (الف)}$$

$$x=2 \Rightarrow 4 + |y-1| = 8 \Rightarrow |y-1| = 4$$

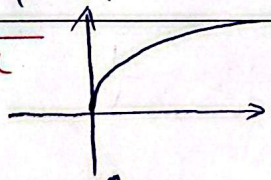
$$y=5, y=-3$$

$$y^5 + 3x = 0 \text{ (ب)}$$

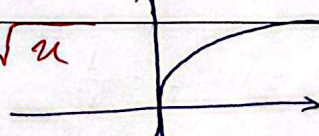
$$\begin{cases} y_1^5 + 3x_1 = 0 \\ y_2^5 + 3x_2 = 0 \end{cases} \Rightarrow y_1^5 = y_2^5 \Rightarrow y_1 = y_2$$

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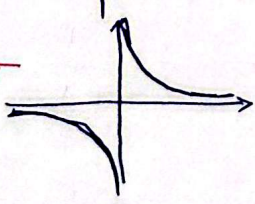
$$y = \sqrt[4]{x} \text{ (الف)}$$



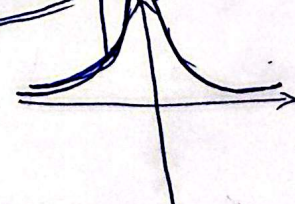
$$y = \sqrt[5]{x} \text{ (ب)}$$



$$y = \frac{1}{x^3} \text{ (ج)}$$

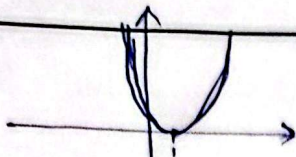


$$y = \frac{1}{x^4} \text{ (د)}$$

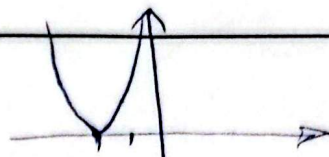


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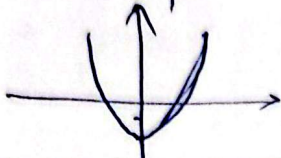
(الف)



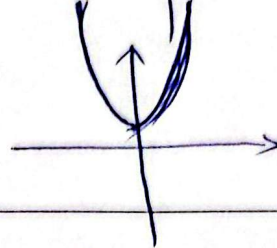
(ب)



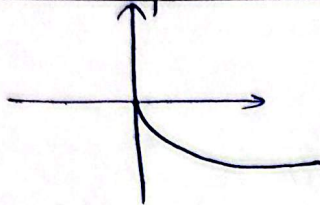
(ج)



(د)



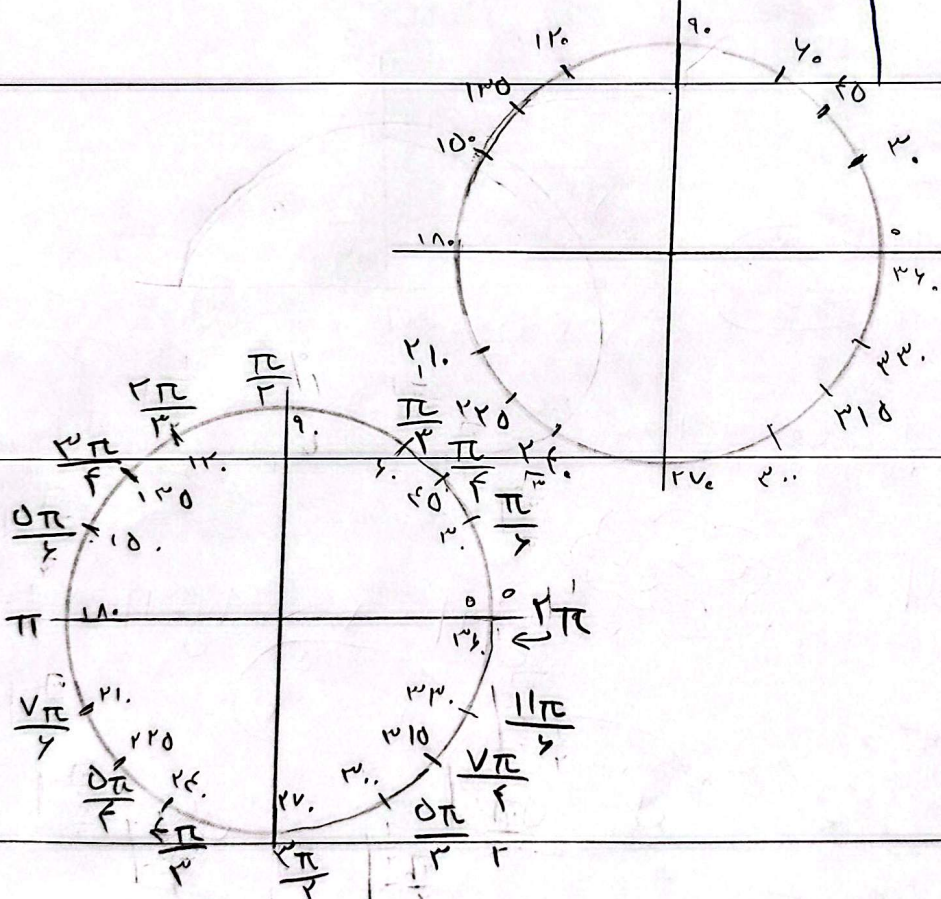
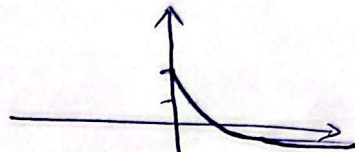
(الف)



(ب) 'نوارد'

(ج) 'نوارد'

(د)



(الف) $\cos 120^\circ = -\frac{1}{2}$

(ب) $\sin 150^\circ = \frac{1}{2}$

(ج) $\cos \frac{5\pi}{3} = \frac{1}{2}$

(د) $\sin \frac{11\pi}{6} = -\frac{1}{2}$