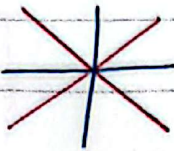


Subject.

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

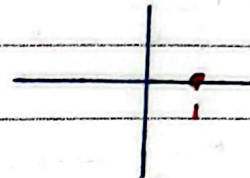
$$a^2 + 3 = 4a \rightarrow a^2 + 3 - 4a = 0 \rightarrow a^2 - 4a + 3 = 0 \rightarrow a = 1, a = 3$$

$$|y| = |x| \rightarrow$$


$$|y| + \sqrt{x-1} = 0 \rightarrow |y| = -\sqrt{x-1} \rightarrow x-1=0 \rightarrow x=1$$

$$|y| = 0 \rightarrow y=0$$

زیر رادیکال نباید منفی باشد و اگر مثبت باشد وقتی بیرون میاریم همیشه
و $|y|$ هیچ وقت نمی تونه منفی بشه جوابش پس باید $x-1=0$



$$|y-1| = \sqrt{x-2} \xrightarrow{x=2} |y-1| = 2 \rightarrow y-1 = \pm 2 \rightarrow y = 3, y = -1$$

به ازای یک مقدار x در مقدار y پس تابع نیست.

$$y^2 - y = \frac{x^2}{2} \xrightarrow{x=0} y^2 - y = 0 \rightarrow y^2 = y \rightarrow y = 0 \text{ و } y = 1$$

$$\sin^2 x + \cos^2 \frac{y}{2} = 1 \xrightarrow{x=0} \cos^2 \frac{y}{2} = 1 \rightarrow y = 0 \text{ و } y = 2\pi$$

$$x^2 y = x \xrightarrow{x=0} 0 = 0 \rightarrow y \in \mathbb{R}$$

لا تمام اعداد حقیقی
می توانند باشند

$$x^2 + |y-1| = 4x \xrightarrow{x=2} 4 + |y-1| = 8 \rightarrow$$

$$|y-1| = 4 \rightarrow y-1 = \pm 4 \rightarrow y = 5 \text{ و } y = -3$$

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ستایش حسن زاده

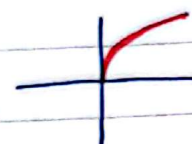
1 $y^0 = 2x \rightarrow y^0 = 0 \rightarrow y = 0 \checkmark$

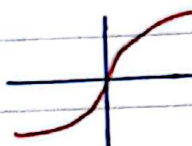
2 if $(x_1, y_1) \in f$
3 if $(x_2, y_2) \in f \} \xrightarrow{x_1 = x_2} y_1 = y_2$

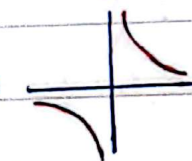
این تابع است

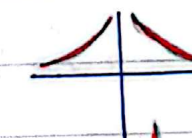
5 $y_1^0 = y_2^0 \rightarrow y_1 = y_2 \checkmark$

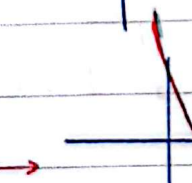
7 $y^0 = 2x \rightarrow y^0 = 0 \rightarrow y = 0 \checkmark$

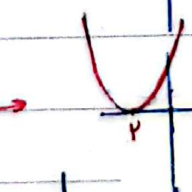
9 الف $y = \sqrt{x} \rightarrow$  $y = \sqrt{x}$ - 6

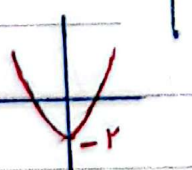
11 ب $y = \sqrt[5]{x} \rightarrow$  $y = \sqrt[5]{x}$

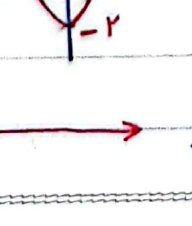
13 ج $y = \frac{1}{x^2} \rightarrow$  $y = \frac{1}{x^2}$

15 د $y = \frac{1}{x^4} \rightarrow$  $y = \frac{1}{x^4}$

18 الف $y = (x-1)^2 \rightarrow$  - 7

20 ب $y = (x+2)^2 \rightarrow$ 

22 ج $y = x^2 - 2 \rightarrow$ 

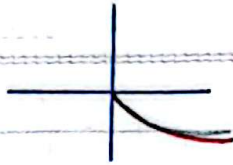
24 د $y = x^2 + 1 \rightarrow$ 

Subject.

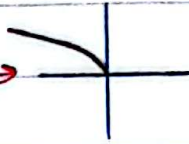
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الف) $y = -\sqrt{x}$ →



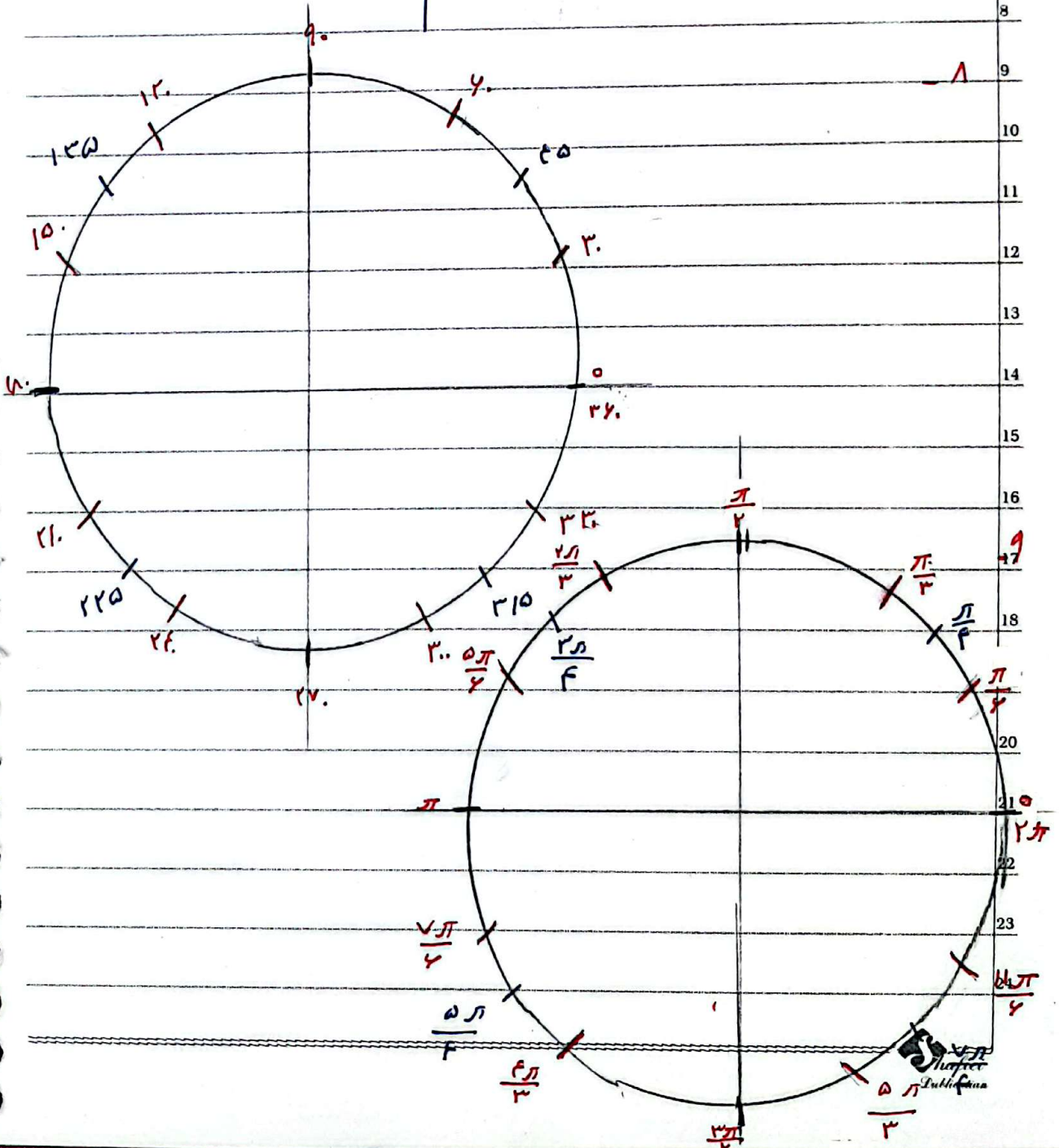
ب) $y = \sqrt{-x}$ →



ج) $y = -\sqrt{-x}$ →



د) $y = -\sqrt{x} + 2$ →



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1 $\cos 120^\circ \rightarrow 120^\circ \mid \begin{pmatrix} -\frac{1}{2} \\ \frac{\sqrt{3}}{2} \end{pmatrix} \rightarrow -\frac{1}{2}$

2

3 $\sin 150^\circ \rightarrow 150^\circ \mid \begin{pmatrix} \frac{1}{2} \\ \frac{\sqrt{3}}{2} \end{pmatrix} \rightarrow \frac{1}{2}$

4

5 $\cos \frac{5\pi}{3} \rightarrow 300^\circ \mid \begin{pmatrix} \frac{1}{2} \\ -\frac{\sqrt{3}}{2} \end{pmatrix} \rightarrow \frac{1}{2}$

6

7 $\sin \frac{11\pi}{4} \rightarrow 330^\circ \mid \begin{pmatrix} \frac{\sqrt{3}}{2} \\ -\frac{1}{2} \end{pmatrix} \rightarrow -\frac{1}{2}$

8

حسنه نباشیر