

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

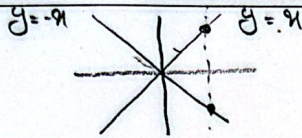
$$a^2 + 3 = 4a$$

$$a^2 - 4a + 3 = 0 \Rightarrow (a-1)(a-3) = 0 \begin{cases} a = 3 \\ a = 1 \end{cases}$$

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الف) $|y| = |x|$

$$y = \pm x$$



تبعیت

ب) $|y| + \sqrt{x-1} = 0$

$$|y| = -\sqrt{x-1}$$

$$|y| \geq 0, -\sqrt{x-1} \leq 0 \Rightarrow \text{باید هر دو صفر باشند} \Rightarrow y = 0/x = 1$$

تبعیت

نکته (۱۰۵)

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الف) $|y-1| = \sqrt{x-2}$

$$x=3 \Rightarrow |y-1|=1 \Rightarrow y = \begin{cases} 0 \\ 2 \end{cases} \text{ تبعیت}$$

ب) $y^4 - y = \frac{x^2}{y}$

$$x=0 \Rightarrow y^4 - y = 0 = y(y^3 - 1) = 0 \begin{cases} 0 \\ +1 \\ -1 \end{cases} \text{ تبعیت}$$

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

$$x=0 \Rightarrow \cos^2 \frac{y}{p} = 1 \Rightarrow \cos \frac{y}{p} = \pm 1$$

$$\cos \frac{y}{p} = 1 \Rightarrow \frac{y}{p} = 0 \Rightarrow y = 0$$

$$\cos \frac{y}{p} = -1 \Rightarrow \frac{y}{p} = \pi \Rightarrow y = 2\pi \text{ تبعیت}$$

$$2xy = x$$

$$x=0 \Rightarrow 2(0)y = 0$$

نی تواند هر مقداری باشد

۳

الف) $x^2 + |y-1| = 4x$

$$|y-1| = 4x - x^2$$

$$x=1 \Rightarrow |y-1| = 3$$

$$\begin{cases} y = 4 \\ y = -2 \end{cases} \text{ تبعیت}$$

ب) $y^4 + 3x = 0$

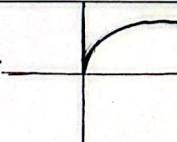
$$y^4 = -3x \Rightarrow y = \sqrt[4]{-3x}$$

تبعیت

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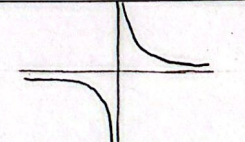
الف)

$$y = \sqrt[4]{x}$$



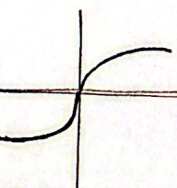
ج)

$$y = \frac{1}{x^3}$$



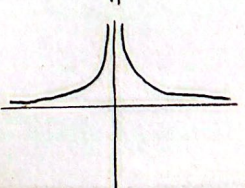
ب)

$$y = \sqrt[5]{x}$$

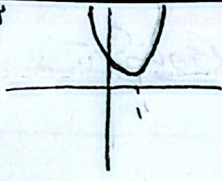
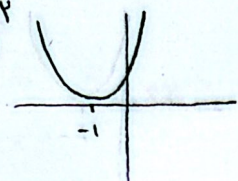
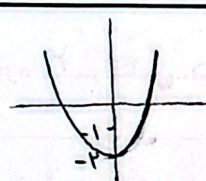
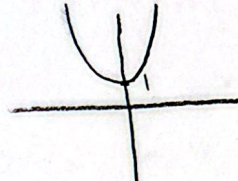
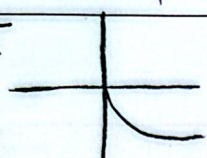
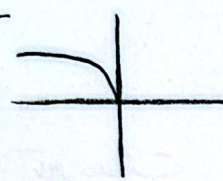
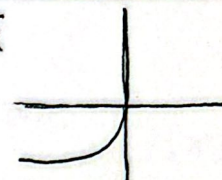
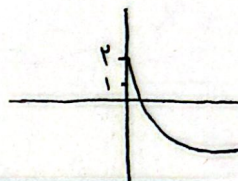
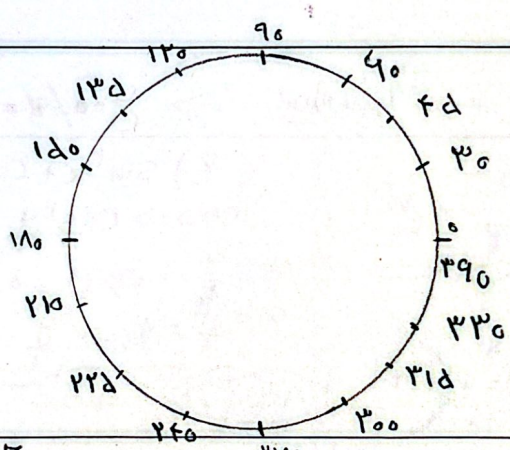
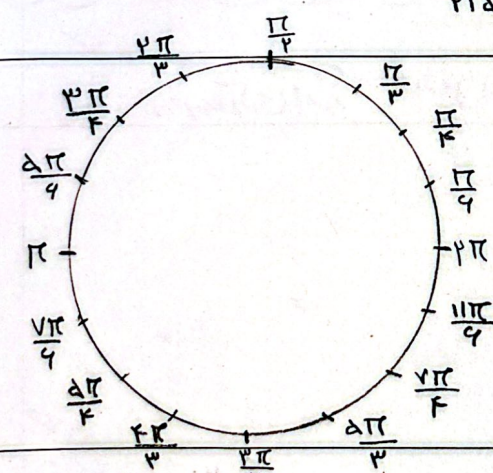


د)

$$y = \frac{1}{x^4}$$



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الف) $y = (x-1)^2$  ب) $y = (x+2)^2$ 	ج) $y = x^2 - 2$  د) $y = x^2 + 1$ 	٦
الف) $y = -\sqrt{x}$  ب) $y = \sqrt{-x}$ 	ج) $y = -\sqrt{-x}$  د) $y = -\sqrt{x} + 2$ 	٧
		٨
		٩
الف) $\cos 120^\circ \Rightarrow -\frac{1}{2}$ ب) $\sin 150^\circ \Rightarrow \frac{1}{2}$ ج) $\cos \frac{4\pi}{3} \Rightarrow -\frac{1}{2}$ د) $\sin \frac{11\pi}{6} \Rightarrow -\frac{1}{2}$		١٠