

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

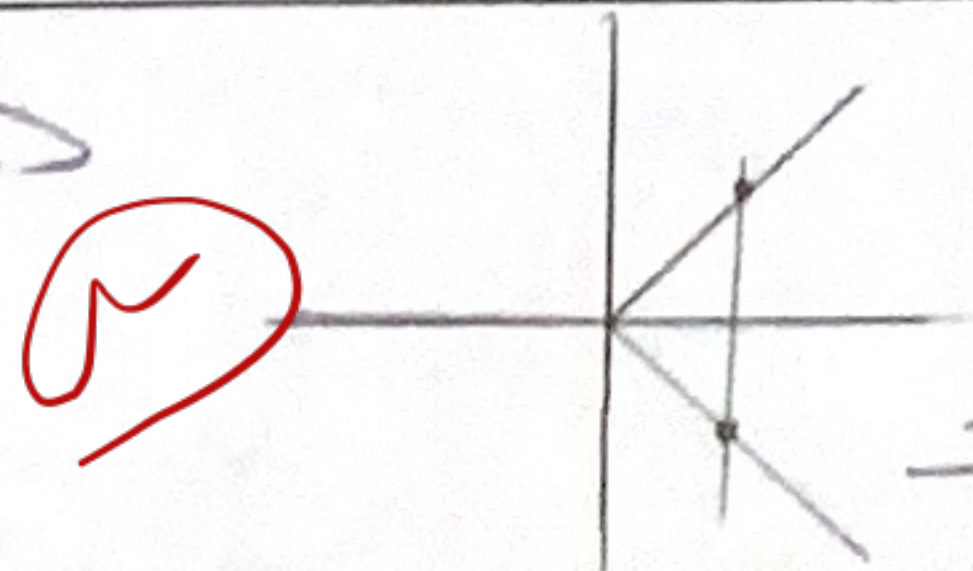
$$\begin{aligned} & \left. \begin{aligned} 1 \rightarrow 4a \\ 1 \rightarrow a^2+3 \end{aligned} \right\} \rightarrow 4a = a^2+3 \rightarrow a^2-4a+3=0 \rightarrow (a-3)(a-1)=0 \end{aligned}$$

به ازای هر دو مقدار a رابطه تابع است $\rightarrow$

$$a=1 \rightarrow \{(1, 4), (1, 4), (3, 1)\}$$

$$a=3 \rightarrow \{(1, 12), (1, 12), (3, 9)\}$$

$$|y| = |x| \Rightarrow y = \pm |x|$$



چون خط عبور ۲ بار
این را قطع کرده پس تابع نیست

حسب هر مثبت هر

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

$$|y-1| = \sqrt{x-2} \rightarrow x=3 \rightarrow |y-1| = 1 \Rightarrow y-1 = \pm 1 \Rightarrow y=2 \text{ or } y=0$$

$$y^5 - y = \frac{x^2}{4} \rightarrow x=0 \rightarrow y(y^4-1)=0 \Rightarrow y=1, y=-1, y=0$$

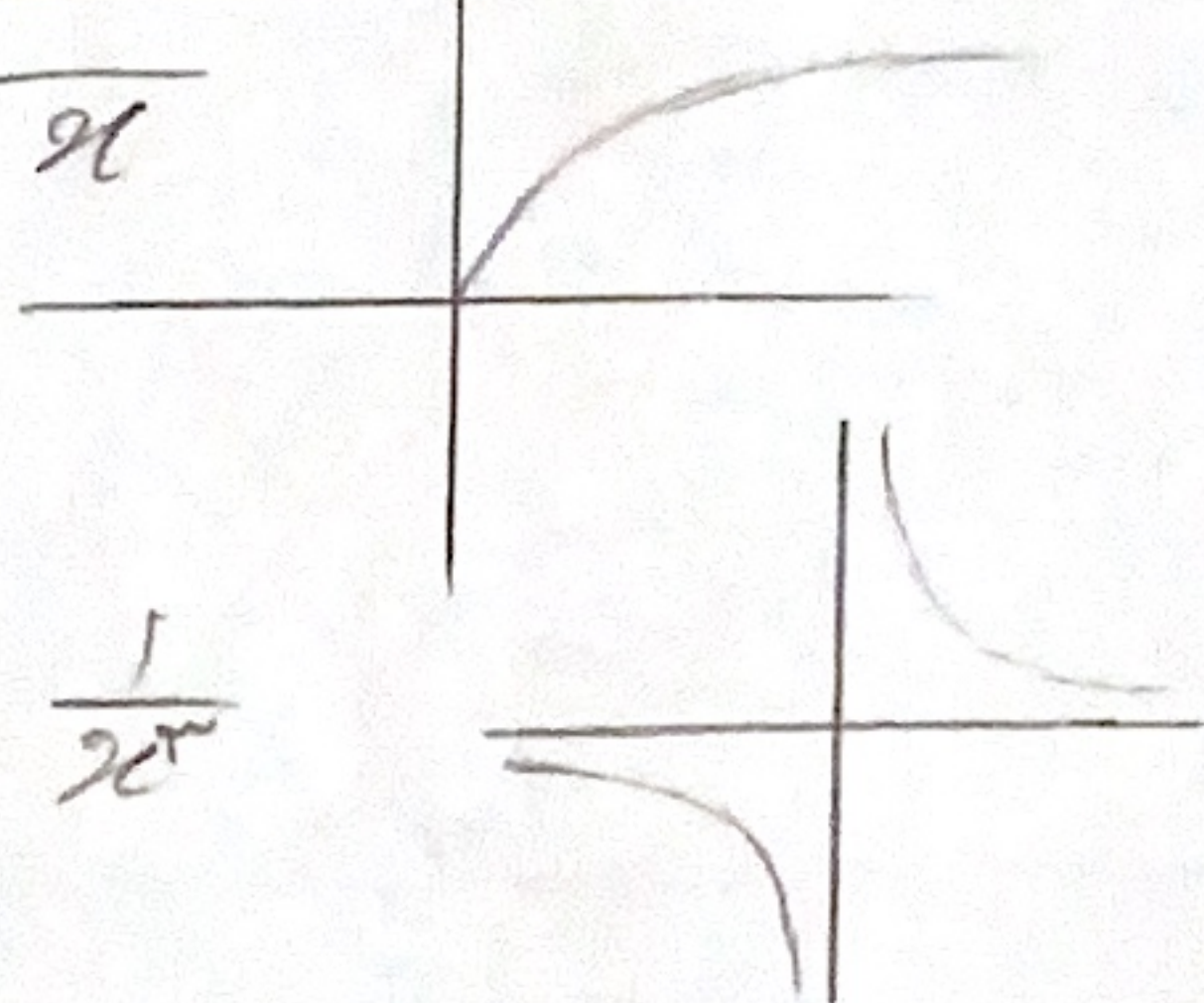
$$\sin^2 x + \cos^2 y = 1 \rightarrow x=0 \rightarrow \cos 0, 2\pi = 1 \Rightarrow y=0 \text{ or } y=2\pi$$

$$\text{هر مقدار } y = x \Rightarrow x=0 \Rightarrow 0 \times y = 0 \Rightarrow$$

$$2x^2 + |y-1| = 4x \rightarrow x=1 \Rightarrow |y-1| = 3 \Rightarrow y-1 = \pm 3 \Rightarrow y=4 \text{ or } y=-2$$

$$y^5 + 3y = 0 \Rightarrow y^5 = -3y \Rightarrow y = \sqrt[5]{-3y} \Rightarrow$$

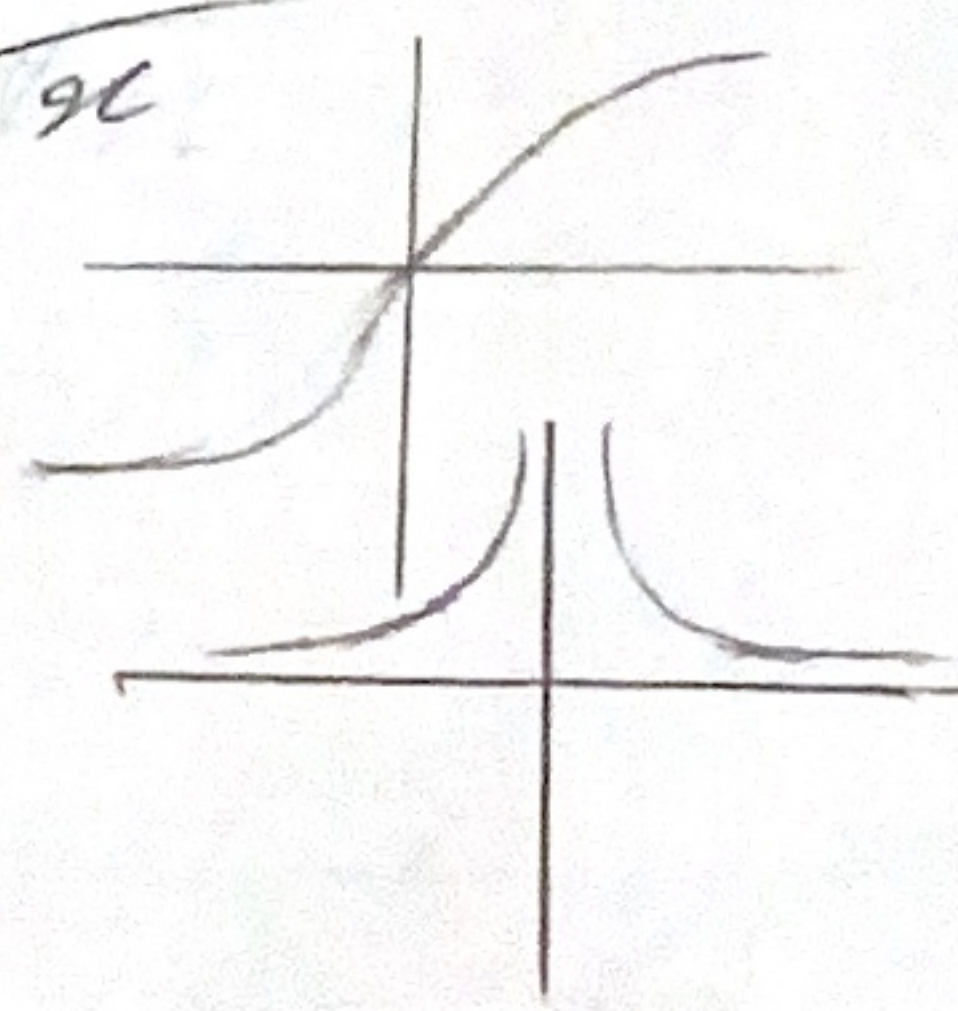
$$x^{\frac{1}{3}} (الف)$$



$$ج) = \frac{1}{x^3}$$

$$x^{\frac{1}{5}} (ب)$$

$$د) \frac{1}{x^4}$$



٦	الف) ب) ج) د) ٥
٧	الف) ب) ج) د) ٥
٨	٥
٩	٥
١٠	الف) $\cos 12^\circ \Rightarrow$ $\Rightarrow \frac{1}{\cos 12^\circ}$ ب) $\sin 108^\circ \Rightarrow$ $\Rightarrow \frac{1}{\sin 108^\circ}$ ج) $\cos \frac{5\pi}{12} \Rightarrow$ $\Rightarrow \frac{1}{\cos \frac{5\pi}{12}}$ د) $\sin \frac{11\pi}{12} \Rightarrow$ $\Rightarrow \frac{1}{\sin \frac{11\pi}{12}}$ ١