

f. $\{(1, 2), (2, 3), (3, 4)\}$

$f(x) = x^2 + 1$

$1 - 4 = -3 \neq 0$

$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a} = \frac{-1 \pm \sqrt{1 - 4}}{2} = \frac{-1 \pm \sqrt{-3}}{2}$

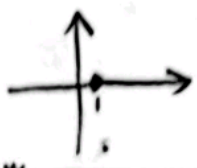
$|y| = |x|$



تابع نیست

الف) تابع نیست

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



تابع هست

ب) تابع هست

الف) $|y-1| = \sqrt{x-2} \Rightarrow |y-1| = \sqrt{1} \Rightarrow |y-1| = 1$

ب) $y^2 - y = \frac{x^2}{4} \Rightarrow y^2 - y = 0$

ج) $\sin^2 x + \cos^2 \frac{y}{2} = 1 \Rightarrow \frac{1}{4} + \cos^2 \frac{y}{2} = 1 \Rightarrow \cos^2 \frac{y}{2} = \frac{3}{4} \Rightarrow \cos \frac{y}{2} = \pm \frac{\sqrt{3}}{2}$

د) $2xy = x \Rightarrow y = \frac{1}{2}$

ه) $x^2 + |y-1| = 2x \Rightarrow 1 + |y-1| = 2 \Rightarrow |y-1| = 1 \Rightarrow y-1 = \pm 1 \Rightarrow y = 0, 2$

و) $y^2 + 3x = 0 \Rightarrow y^2 = -3x$

ز) $y = \sqrt{x} \Rightarrow y^2 = x$

ح) $y = \sqrt[3]{x} \Rightarrow y^3 = x$

ط) $y = \frac{1}{x} \Rightarrow yx = 1$

ث) $y = \frac{1}{x^2} \Rightarrow yx^2 = 1$

ج) $y = \frac{1}{x^3} \Rightarrow yx^3 = 1$

د) $y = \frac{1}{x^4} \Rightarrow yx^4 = 1$

ه) $y = \frac{1}{x^5} \Rightarrow yx^5 = 1$

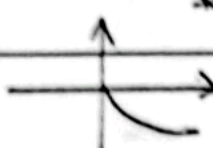
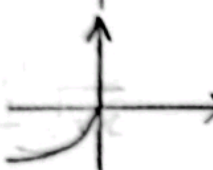
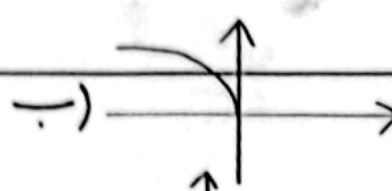
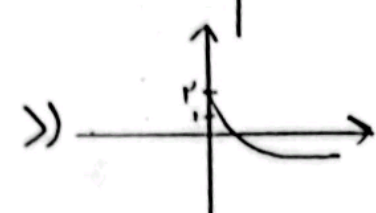
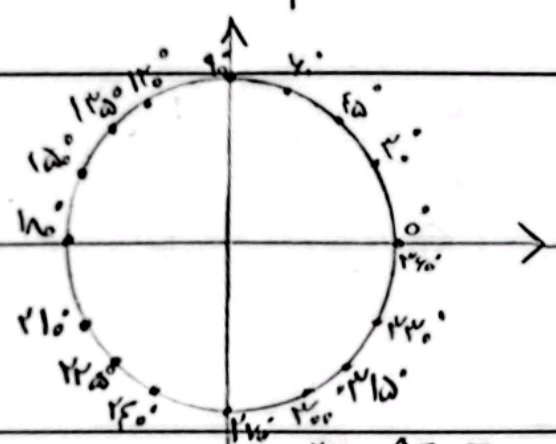
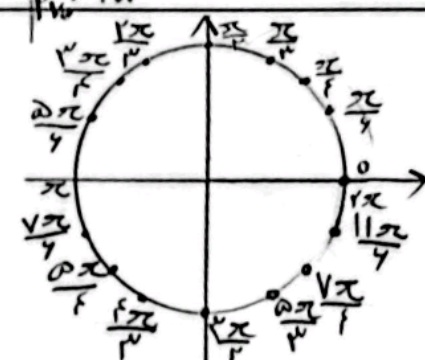
و) $y = \frac{1}{x^6} \Rightarrow yx^6 = 1$

ز) $y = \frac{1}{x^7} \Rightarrow yx^7 = 1$

ح) $y = \frac{1}{x^8} \Rightarrow yx^8 = 1$

ط) $y = \frac{1}{x^9} \Rightarrow yx^9 = 1$

ث) $y = \frac{1}{x^{10}} \Rightarrow yx^{10} = 1$

الف) $y = (x-1)^2 \rightarrow$  ب) $y = (x+1)^2 \rightarrow$  ج) $y = x^2 - 2 \rightarrow$ 	د) $y = x^2 + 1 \rightarrow$ 	٦
الف)  ج) 	ب)  د) 	٧
	٨	
	٩	
الف) $-\frac{1}{p}$ ب) $\frac{1}{p}$ ج) $\cos(\frac{4\pi}{3}) = \cos 240^\circ = -\frac{1}{2}$ د) $\sin \frac{11\pi}{6} = \sin 330^\circ = -\frac{1}{2}$	١٠	