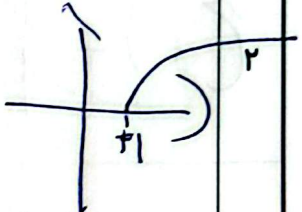
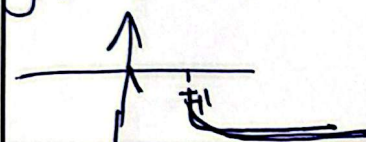


$(10a) \text{ و } (10a^2 + 3) \Rightarrow 2a = a^2 + 3 \Rightarrow a^2 - 2a + 3 = 0$   
 اگر ① بخازیم جواب  $a = \frac{1}{2} \Rightarrow (a-1)(a-3) = 0$  درست است.

جواب  $\boxed{1}$   $\Rightarrow (10a) \text{ و } (10a^2 + 3)$

تابع است.  $\Rightarrow y = |x| \Rightarrow |y| = |x|$  الف

$|y| + \sqrt{x-1} = 0 \Rightarrow |y| = -\sqrt{x-1}$  تابع است.   



الف)  $x=3 \Rightarrow |y-1|=1 \Rightarrow y=2 \text{ و } 0$

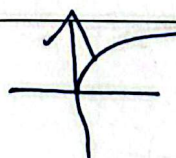
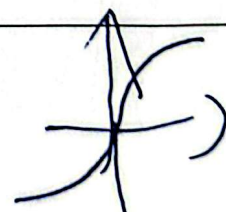
ب)  $x=0 \Rightarrow y(y^2-1)=0 \Rightarrow y=0 \text{ و } 1 \text{ و } -1$

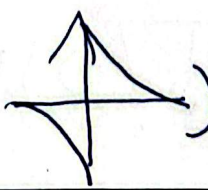
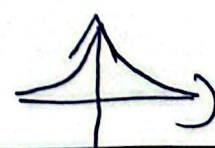
ج)  $\sin^2 x + \cos^2 \frac{y}{2} = 1 \Rightarrow \sin^2 \theta + \cos^2 \frac{y}{2} = 1$    
 $\Rightarrow y = \frac{\pi}{2} \text{ و } \frac{3\pi}{2}$

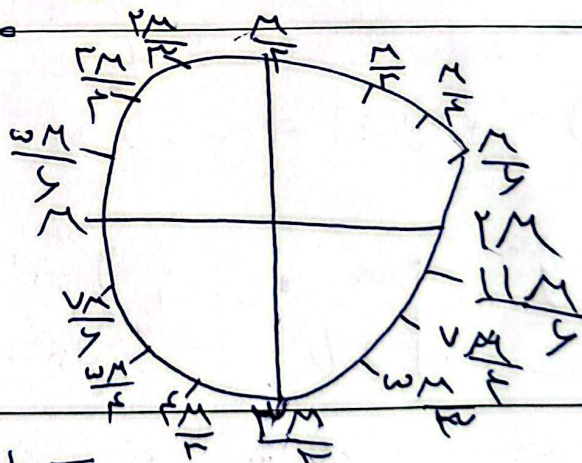
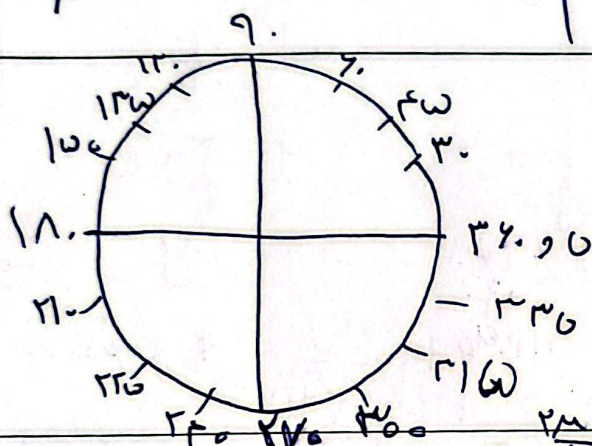
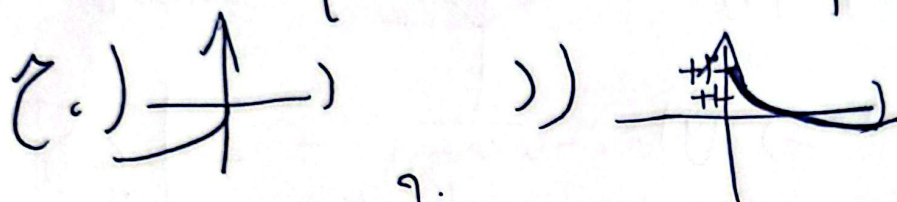
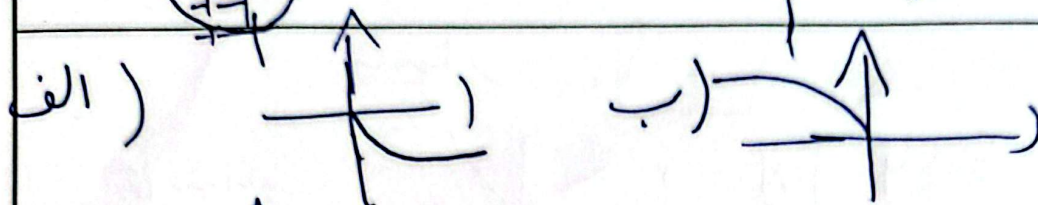
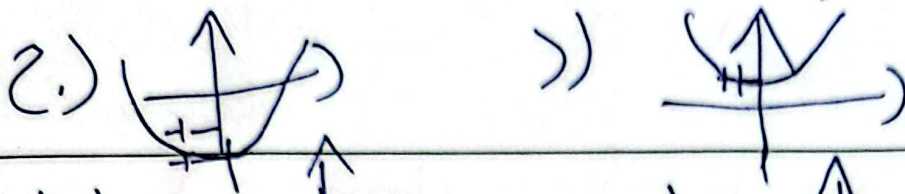
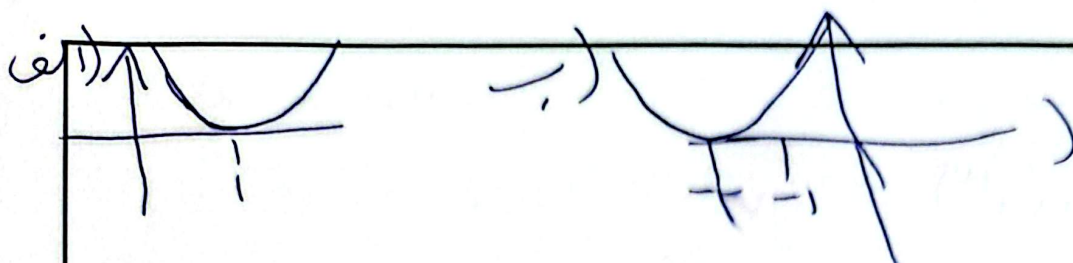
د)  $x=0 \Rightarrow 2x \times y = 0 \Rightarrow y \rightarrow$  بی‌شمار جواب

الف)  $x^2 + |y-1| = x \Rightarrow x=1 \Rightarrow |y-1|=2 \Rightarrow y = \boxed{3 \text{ و } -1}$    
 تابع نیست

ب)  $y^3 + 2x = 0 \Rightarrow y^3 + 2x_1 = 0 \Rightarrow y_1^3 = -2x_1$    
 $y_2^3 + 2x_2 = 0 \Rightarrow y_2^3 = -2x_2$    
 $y_1 = y_2$  تابع است

الف)  $y = \sqrt{x}$  
 ب)  $y = \sqrt{x}$  

ج)  $\frac{1}{x^2}$  
 د)  $x = \frac{1}{x^2}$  



(الف)  $\frac{-1 \pm \sqrt{5}}{2}$

$$\Rightarrow \sqrt{\frac{42-12}{2}} \div$$

$$2.) \frac{\omega M}{r} = r_{o.p.} \Rightarrow \left| \frac{1}{1 + j\frac{\omega M}{r}} \right| = \left| \frac{1}{1 + j\frac{1}{r}} \right| \Rightarrow \left| \frac{1}{1 + j} \right| = \left| \frac{1}{\sqrt{2}} \right|$$