نام و نام خانوادگی محمدمتین خمسه تکلیف شماره ۲ کلاس دهم پسه A

$\alpha^2+3=4\alpha \rightarrow \alpha^2-4\alpha+3=0 \quad (\alpha-1)(\alpha-3)=\alpha$ [۱ ✓ ۳ ✓]

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

$\{(1,12),(2,9)\}$

سوال ۳

الف) $x=3 \rightarrow |y-1|=\sqrt{3-2} \rightarrow |y-1|=1 \quad y=(2)\text{و}(0)$

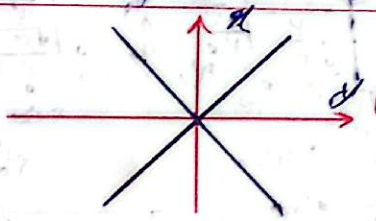
ب) $x=0 \longrightarrow y^5-y=0 \longrightarrow y(y^4-1)=0 \quad y=(-1),(1)\text{و}(0)$

ج) $x=0 \longrightarrow \sin^2 x+\cos^2\frac{y}{2}=1 \rightarrow \cos^2\frac{y}{2}=\cos^2 x \quad y=(\pi)\text{و}(0)$

د) $x=0 \longrightarrow 2xy=x \rightarrow 0=0$ برای هر مقدار y جواب می‌دهد $y=\infty$

سوال ۲

الف) $|x|=|y| \longrightarrow \begin{matrix} y=x \\ y=-x \end{matrix} \longrightarrow$

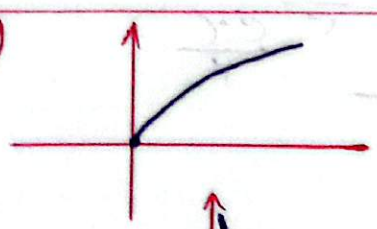


ب) $|x|+\sqrt{x-1}=0 \rightarrow x=1 \quad y=0$ هردو صفر شوند

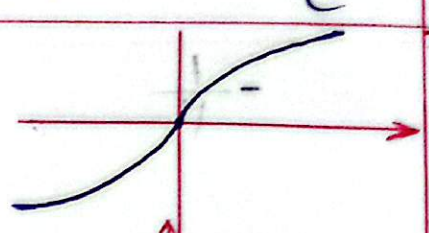
الف) $x^2+|y-1|=4x \xrightarrow{x_1=x_2} \begin{matrix} |y-1|=4 \\ |y-1|=4 \end{matrix} \longrightarrow |x|=4y$ تابع نیست

ب) $y_1^5+cx=0 \xrightarrow{x_1=x_2} \begin{matrix} y_1^5+c=0 \\ y_2^5+c=0 \end{matrix} \xrightarrow{c=c} y_1^5=y_2^5$ تابع است

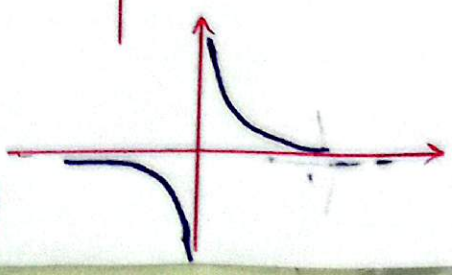
الف)



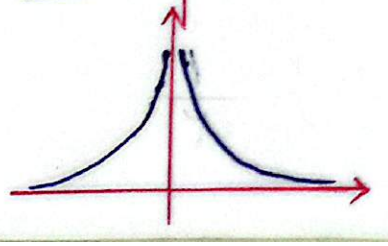
ب)



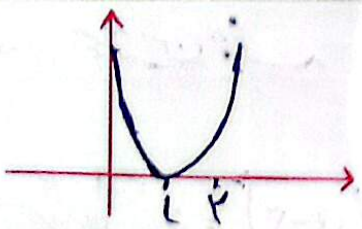
ج)



د)

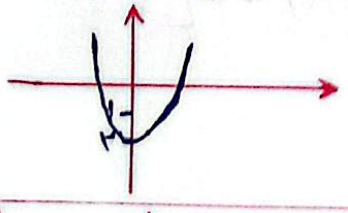


الف)

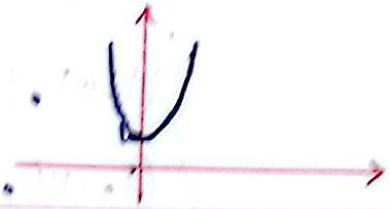


ب)

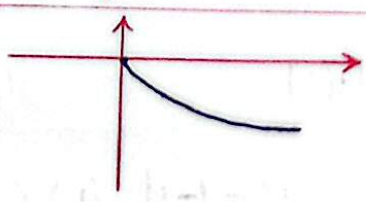
ج)



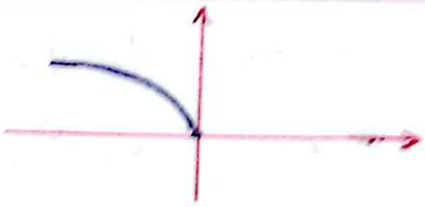
د)



الف)

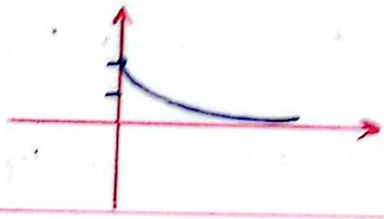


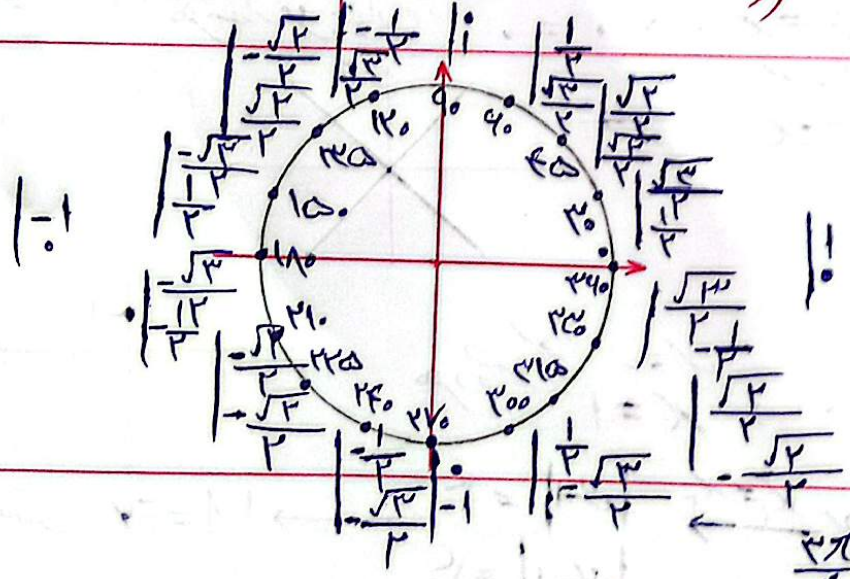
ب)

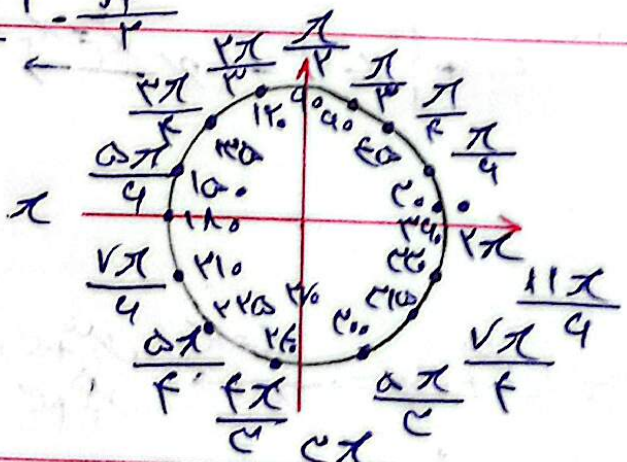


ج)

د)







الف) $-\frac{1}{2}$

ب) $\frac{1}{2}$

ج) $\frac{\sqrt{3}}{2}$

د) $-\frac{1}{2}$