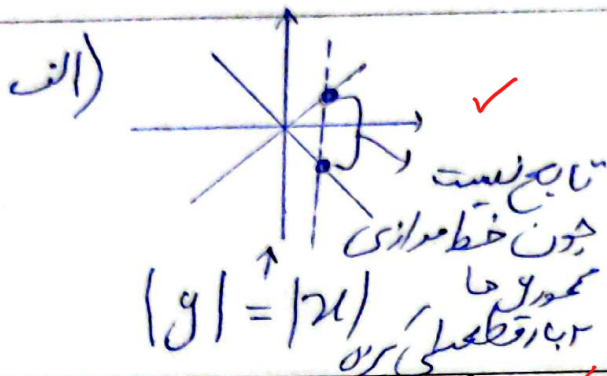


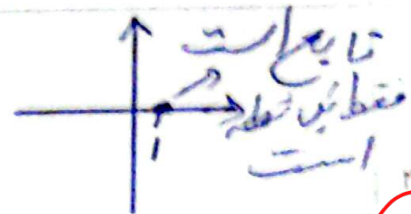
$$a^2 + 3 = 4a \rightarrow a^2 + 3 - 4a = 0 \rightarrow (a-2)(a-1) = 0$$

$$\Rightarrow \begin{cases} a=2 \\ a=1 \end{cases} \Rightarrow \{(2, 7), (1, 4)\} \checkmark$$

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



(ب)



$$|y| + \sqrt{x-2} = 0$$

$$(الف) |y-1| = \sqrt{x-2}$$

$$y-1 = \pm \sqrt{x-2}$$

$$y = 1 \pm \sqrt{x-2}$$

$$\Rightarrow u=2 \rightarrow y = 1 \pm 1 \rightarrow y=0 \text{ و } y=2$$

$$(ب) y^2 - y = \frac{x^2}{4}$$

$$y(y-1) = \frac{x^2}{4} \rightarrow y(y-1) \geq 0 \rightarrow y=0 \text{ و } y=1$$

$$x=0 \rightarrow y=0 \text{ و } y=1$$

$$(ج) \sin^2 u + \cos^2 \frac{y}{r} = 1 \rightarrow u=90^\circ \text{ و } y=0 \text{ و } y=1$$

$$(د) ruy = x \rightarrow u=0 \rightarrow y=R$$

$$(۲) \text{ چون برای هر دو محور رار}$$

$$(الف) u^2 + (y-1) = 4u \rightarrow |y-1| = 4u - u^2 \rightarrow y-1 = \pm(4u - u^2)$$

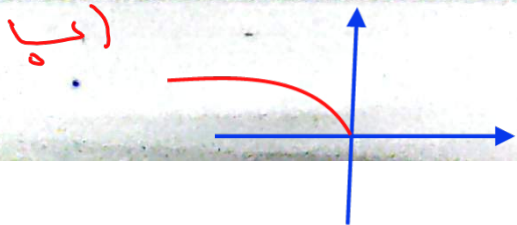
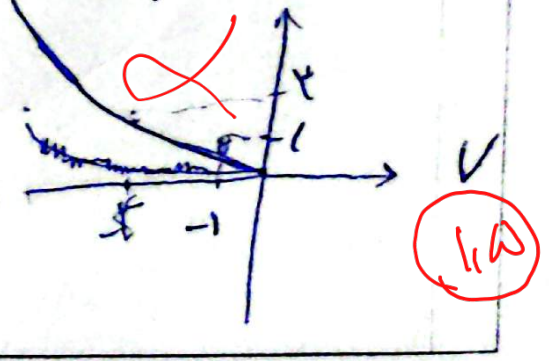
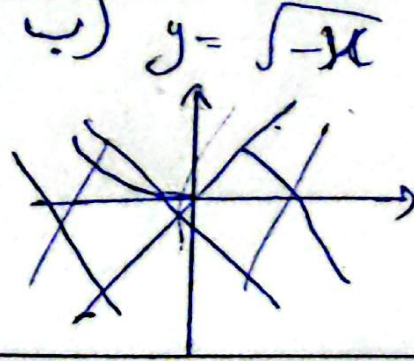
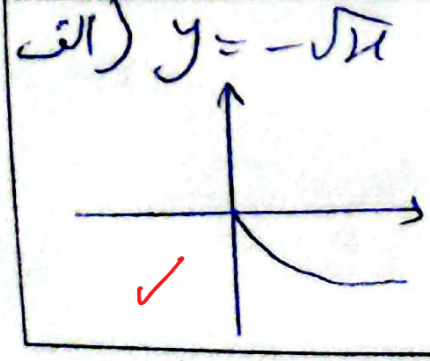
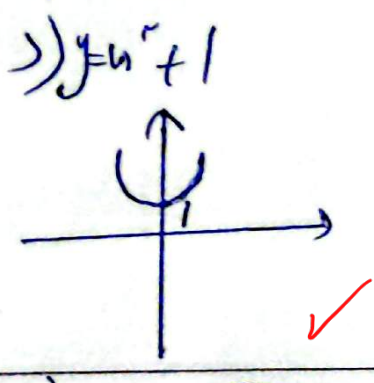
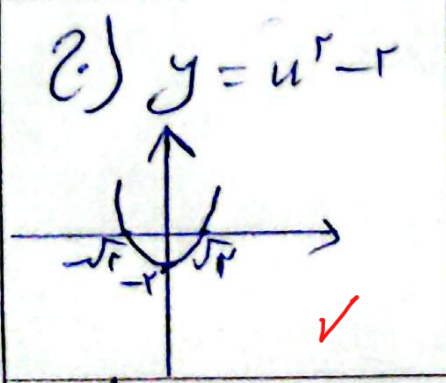
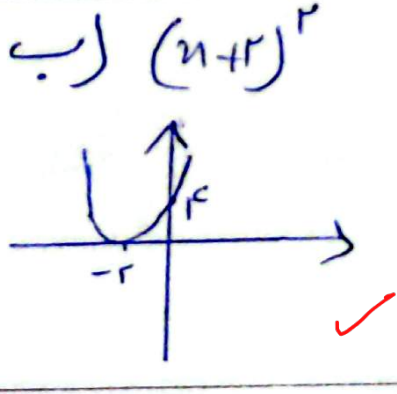
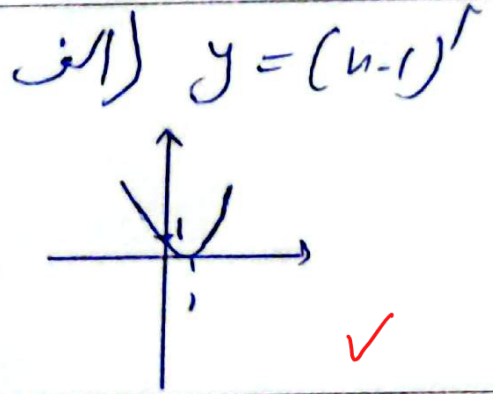
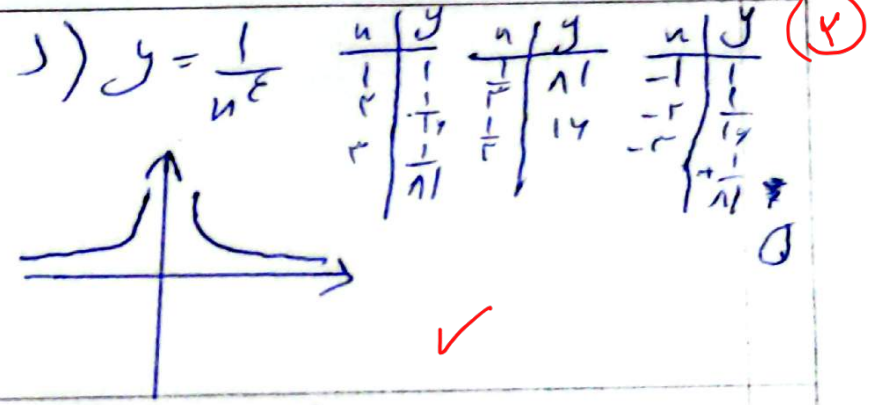
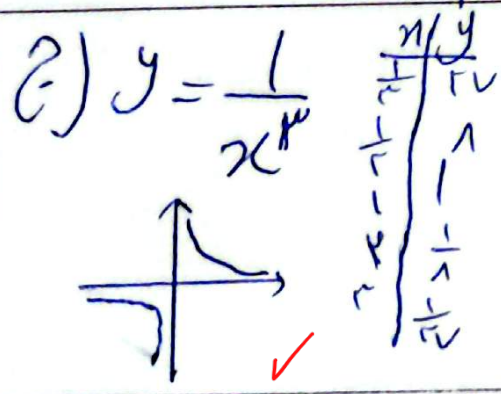
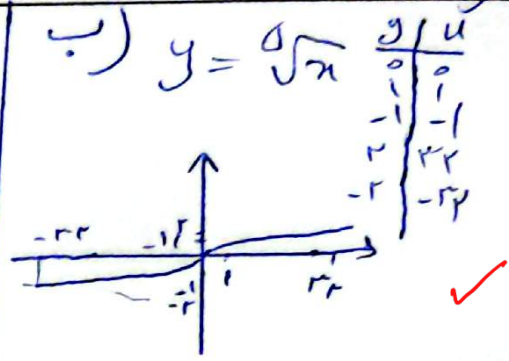
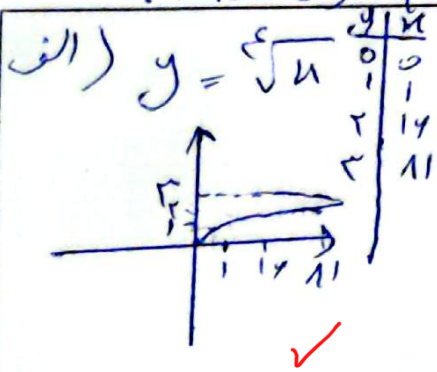
$$y = 1 \pm (4u - u^2) \rightarrow u=2 \rightarrow y=4$$

$$(ب) y^2 + 2u = 0 \rightarrow y_1^2 + 2u_1 = 0$$

$$y_2^2 + 2u_2 = 0$$

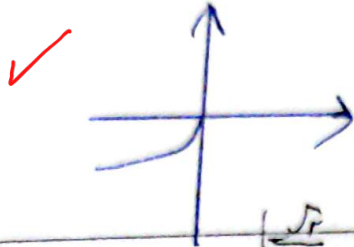
$$y_1 = y_2$$

$$\text{تابع نیست}$$

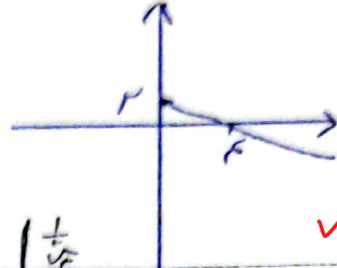


برهان شریانی تکلیف ۲: رسم دایره B چنانچه

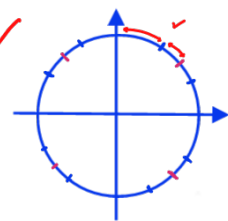
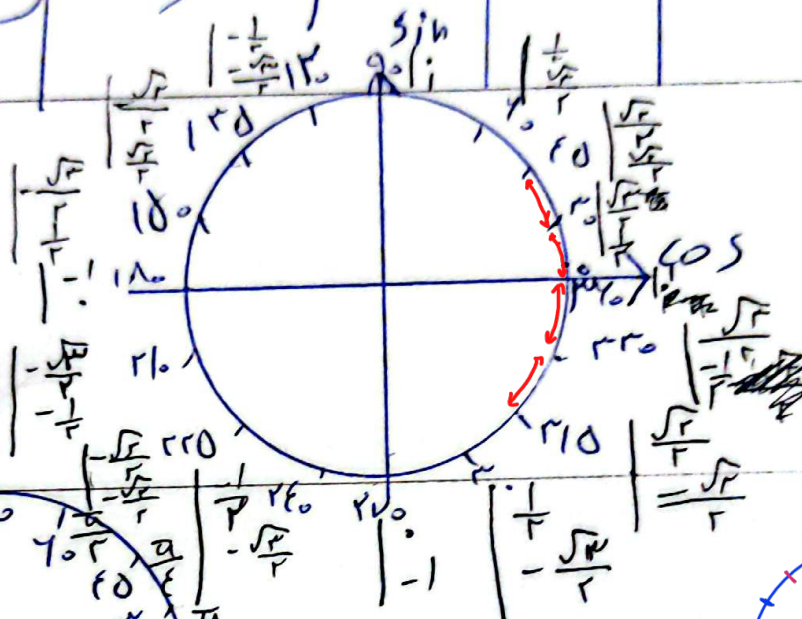
ج) $y = -\sqrt{x}$



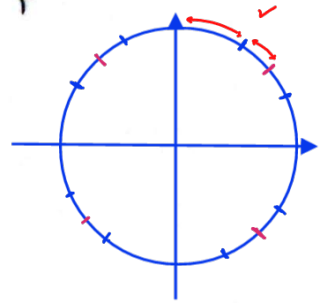
د) $y = -\sqrt{x+2}$



x	y
0	0
1	-1
4	-2
9	-3



1/10



1/10

الف) $\cos 150^\circ = -\frac{1}{2}$ ✓ ب) $\sin 150^\circ = \frac{1}{2}$ (2)

ج) $\cos \frac{5\pi}{3} = \frac{1}{2}$ ✓ د) $\sin \frac{11\pi}{4} = -\frac{1}{2}$ ✓