

۱.

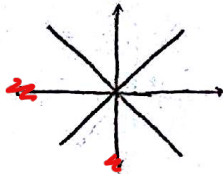
$$a^2 + 3 = 4a \rightarrow a^2 - 4a + 3 = 0 \rightarrow \text{مجموع ضرایب} = 0 \rightarrow a = 1, a = 3$$

✓

(۲)

۲.

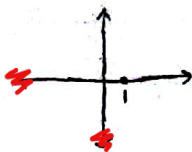
✓ $|y| = |x| \rightarrow y = \pm x$ (الف)



تابع نیت x

(۲)

✓ $|y| = -\sqrt{x-1}$ $\rightarrow (1, 0)$



تابع است ✓

نقطه در صورتی ممکن است که در هر طرف
صفحه باشد

۳.

✓ $x = 3 \rightarrow |y-1| = 1 \rightarrow y < 0$

✓ $x = 0 \rightarrow y^2 - y = 0 \rightarrow y(y^2 - 1) = 0 \rightarrow y < 1$

✓ $x = 0 \rightarrow \cos^2 \frac{y}{r} = 1 \rightarrow \frac{y}{r} < \pi \rightarrow y < 2\pi$

✓ $x = 0 \rightarrow y \rightarrow \text{بیشتر عددی توان با ۲}$

(۲)

۴.

✓ $x = 1 \rightarrow |y-1| = 4-1=3 \rightarrow y < -2$

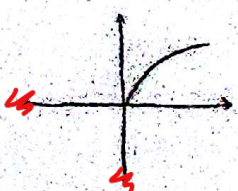
تابع نیت x

(۲)

✓ if $(x_1, y_1) \in f$ $\left\{ \begin{array}{l} x_1 = x_2 \\ y_1 = y_2 \end{array} \right. \rightarrow \begin{array}{l} y_1^2 + 3x_1 = 0 \\ y_2^2 + 3x_2 = 0 \end{array} \rightarrow y_1^2 = y_2^2 \rightarrow y_1 = y_2$ ✓

تابع هست ✓

(الف)



✓

ب)

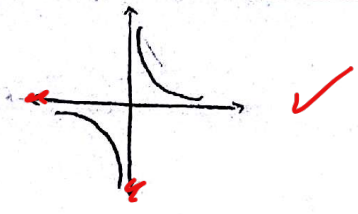


✓

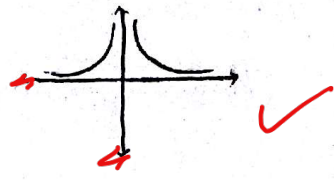
(۲)

۵.

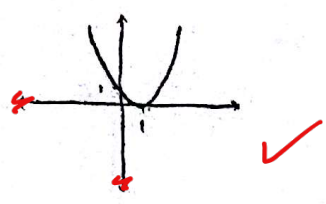
ج)



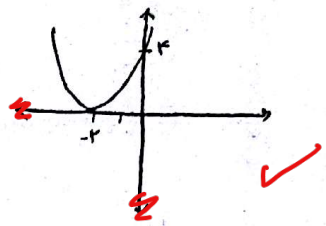
د)



الف)



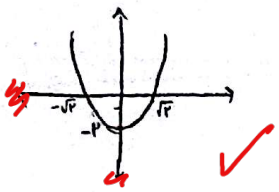
ب)



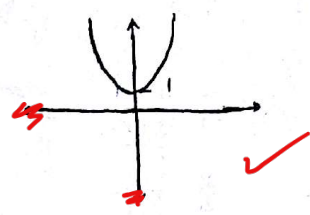
9

2

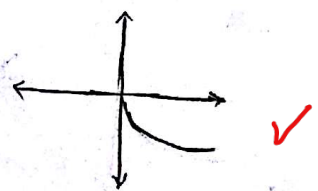
ج)



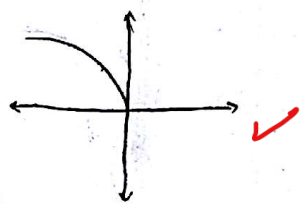
د)



الف)



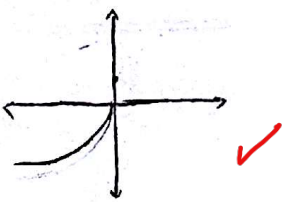
ب)



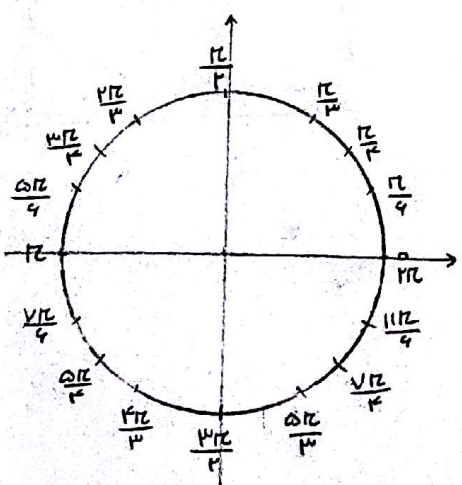
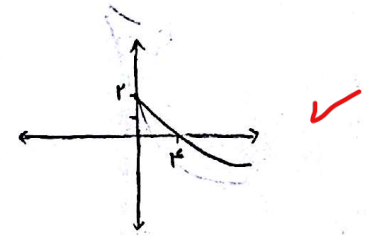
10

2

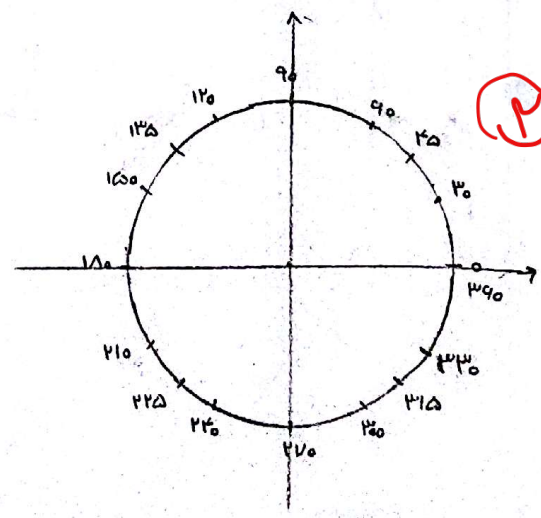
ج)



د)



2



2

الف) $-\frac{1}{p}$ ✓

ب) $\frac{1}{p}$ ✓

10

2

ج) $\frac{1}{p}$ ✓

د) $-\frac{1}{p}$ ✓