

$$fa = a^2 + 3$$

$$-a^2 + fa - 3 = 0$$

جمع فایب هفتر است

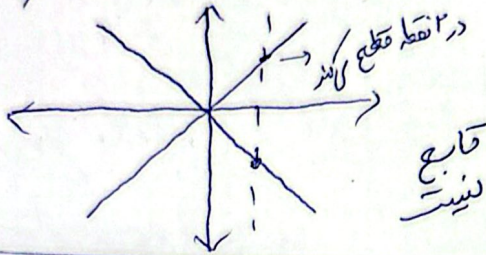
$$1, \frac{c}{a} = -\frac{3}{-1} = 3$$

$$1, 3$$

(۲)

$$|y| = |x|$$

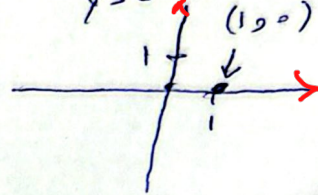
$$y = x \text{ و } y = -x$$



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

هر دو باید صفر باشند

$$\begin{aligned} x-1 &= 0 \\ x &= 1 \\ y &= 0 \end{aligned}$$



تابع نقطه

تابع هست

(۲)

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

$$x=2$$

$$|y-1| = \sqrt{1}$$

$$|y-1| = 1$$

$$y-1 = 1 \Rightarrow y = 2$$

$$y-1 = -1 \Rightarrow y = 0$$

$$y^5 - y = \frac{x^2}{2}$$

$$x=0$$

$$y^5 - y = 0 \Rightarrow y(y^4 - 1) = 0$$

$$y = -1, 0, 1$$

$$\sin^2 x + \cos^2 y = 1$$

$$0 + \cos^2 y = 1$$

$$\cos^2 y = 1$$

$$y = 0, \pi, 2\pi, \dots$$

$$\tan y = x$$

$$x=0$$

$$y = 0$$

هر عددی که مشددر کفر

(۲)

$$x^2 + |y-1| = 4x$$

$$x=1$$

$$1 + |y-1| = 4$$

$$|y-1| = 3$$

$$y-1 = -3 \Rightarrow y = -2$$

$$y-1 = 3 \Rightarrow y = 4$$

بایستی معادله بنویس!

$$y^5 + 3x = 0$$

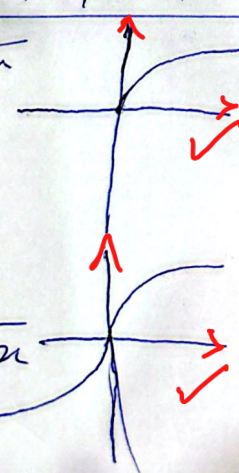
توان هم فرد هست پس اعداد

علامت جمع هست پس تابع است

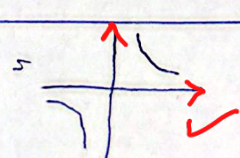
این نکته! فرد + فرد = 0 تابع است

(۲)

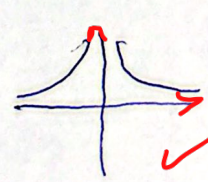
$$y = \sqrt{x}$$



$$y = \frac{1}{x^3}$$

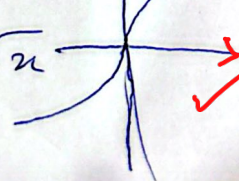


$$y = \frac{1}{x^4}$$



(۲)

$$y = \sqrt[5]{x}$$



الف) $y = (x-1)^2$ ✓

ج) $y = x^2 - 2$ ✓

4

ب) $y = (x+1)^2$ ✓

د) $y = x^2 + 1$ ✓

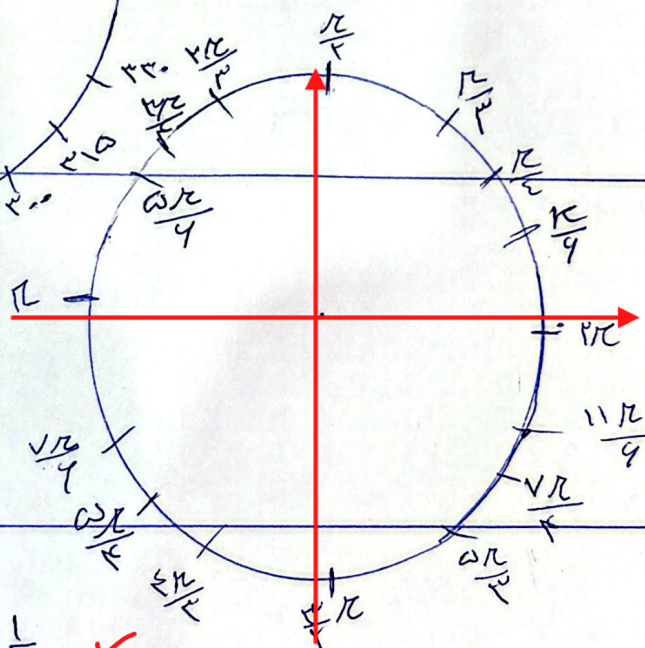
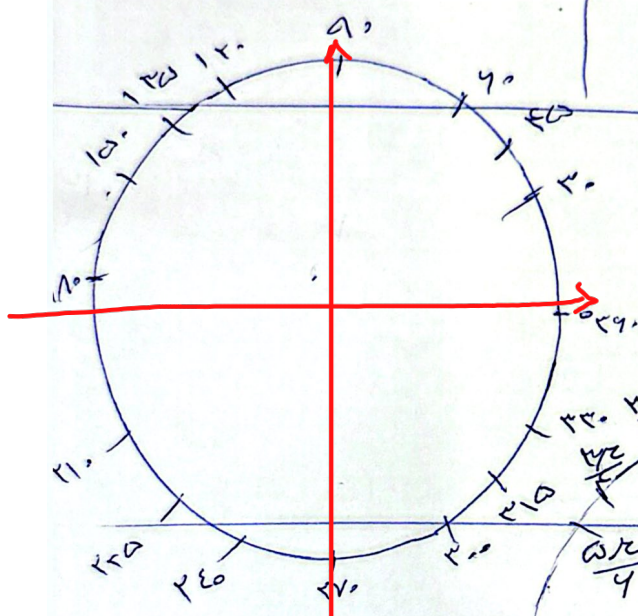
الف) $y = -\sqrt{x}$ ✓

ج) $y = -\sqrt{-x}$ ✓

د) $y = \sqrt{x} e^x$ ✓

4

ب) $y = \sqrt{x}$ ✓



1, 1/2

1, 1/2

الف) $\cos(\pi/2) = -\frac{1}{2}$ ✓

ب) $\sin(\pi/2) = \frac{1}{2}$ ✓

ج) $\cos(\pi/4) = \frac{1}{2}$ ✓

د) $\sin(\pi/4) = \frac{1}{2}$ ✓

4

سوال ۴ از تعریف ریاضی استفاده می‌کنیم

ب) $y^\omega + 3x = 0$ از تعریف ریاضی

$$\begin{cases} y_1^\omega + 3x_1 = 0 \\ y_2^\omega + 3x_2 = 0 \end{cases} \xrightarrow{x_1 = x_2} y_1^\omega = y_2^\omega \Rightarrow y_1 = y_2 \quad \text{تامج هست}$$