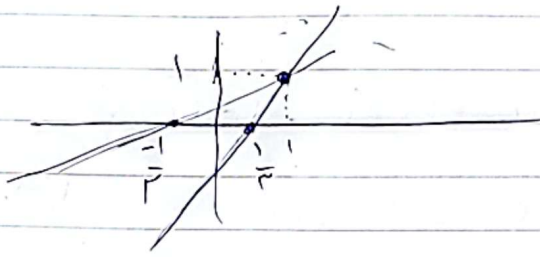


$$ky = \frac{kx-1}{r} \quad \text{و} \quad y = \frac{e}{r}x + \frac{1}{r}$$

$$kx = ry - 1$$

$$\frac{kx+1}{r} = y$$



$$\frac{1}{e} + \frac{1}{r} = \frac{2}{r}$$

$$\frac{kx+1}{r} = \frac{e}{r}x + \frac{1}{r} \Rightarrow$$

$$\frac{k}{r}x + \frac{1}{r} = \frac{e}{r}x + \frac{1}{r}$$

$$S = \frac{\frac{2}{r} \times 1}{r} = \left(\frac{2}{r}\right)$$

$$\frac{kx+1}{e} = 0 \Rightarrow kx+1 = 0$$

$$kx = -1 \quad x = -\frac{1}{k}$$

$$kx-1 = 0$$

$$x = \frac{1}{k}$$

$$\frac{2}{r}x = \frac{2}{r}$$

2

این $y = x^2 - 2x + 2 \Rightarrow (x-1)^2 + 2$ [3 و 1]

بازوی درونی

$y - 2 = (x-1)^2 \Rightarrow \pm \sqrt{y-2} + 1 = x \Rightarrow \pm \sqrt{x-2} + 1 = y$

بازوی بیرونی

این $y = 2 - x^2 \Rightarrow (x-1)^2 + 2$ [3 و 1]

بازوی بیرونی

3

این $y = (x-1)^2 + 2$ [3 و 1]

بازوی بیرونی

$y - 2 = (x-1)^2 \Rightarrow \pm \sqrt{y-2} = x-1 \Rightarrow x = \pm \sqrt{y-2} + 1$

4

$y = \pm \sqrt{x-2} + 1 \Rightarrow y = \pm \sqrt{x-2} + 1$ [4 و 1]

بازوی بیرونی

این $y = 2 - x^2$

بازوی بیرونی

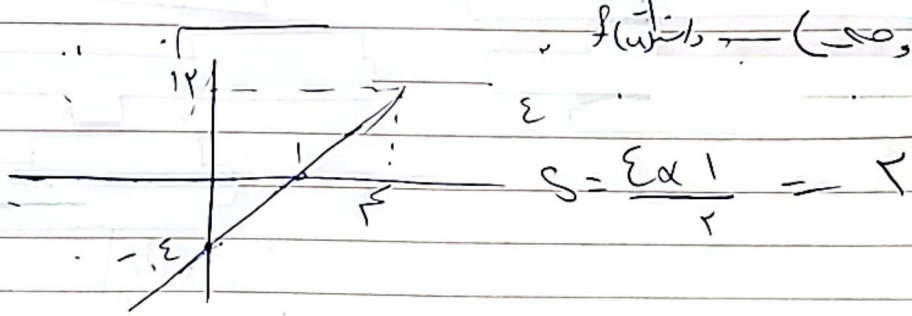
$y = 2 - x^2$

$$u = 2u - \sqrt{4 + \epsilon u(u - \epsilon)} \Rightarrow 2u - \sqrt{4 + \epsilon^2 14u + \epsilon u^2 - \epsilon^2 14u + 4}$$

از ۲ به قبل وارد می شود پس به ۵

$$y = 2u - \sqrt{\epsilon(u+1)^2} \Rightarrow \epsilon(u^2 - 2u + 1)$$

$$y = 2u + 2(u+1) \Rightarrow y = 4u + 2 \Rightarrow y = \epsilon u - \epsilon$$



$$y_1 = y \Rightarrow \frac{u_1}{\sqrt{u_1^2 - \omega}} = \frac{u_2}{\sqrt{u_2^2 - \omega}} \Rightarrow \frac{u_1^2}{u_1^2 - \omega} = \frac{u_2^2}{u_2^2 - \omega}$$

این معادله را در هر دو طرف به هم ضرب می کنیم و در انتهای آن است $u_1 = \pm u_2$
 بودن و به هم می پیوندد

$$y = \frac{u}{\sqrt{u^2 - \omega}} \Rightarrow$$

$$y^2 = \frac{u^2}{u^2 - \omega} \Rightarrow y^2(u^2 - \omega) = u^2 \Rightarrow$$

$$u^2(1 - y^2) = \omega y^2 \Rightarrow u^2 = \frac{\omega y^2}{1 - y^2} \Rightarrow$$

$$\frac{\sqrt{\omega y^2}}{\sqrt{1 - y^2}} = \frac{\sqrt{\omega} y}{\sqrt{1 - y^2}}$$

با توجه به اینکه y و ω مثبت هستند

$$y = \frac{-\omega n - 1}{1 + n}$$

$$\frac{-\omega(n-1) - 1}{1 + (n-1)} = 1 \Rightarrow$$

$$\frac{-\omega n + \omega - 1}{n-1} = 1 \Rightarrow$$

$$\frac{-\omega n - 1}{n-1} = 1 \Rightarrow$$

$$\frac{-\omega n - 1}{n-1} = 1 \Rightarrow$$

$$\frac{-1}{n-1} = 1 \Rightarrow$$

$$\frac{y}{y+1} = 1 \Rightarrow$$

$$\frac{n}{n+1} = \frac{1}{n-1} \Rightarrow$$

$$\frac{n}{n+1} + \frac{1}{n-1} = 1 \Rightarrow$$

$$\frac{n^2 - n + 1n^2 + n}{(n-1)(n+1)} =$$

$$\frac{2n^2 - n}{(n-1)(n+1)} = \frac{2n(n-1/2)}{(n-1)(n+1)}$$

$$n - 1/2 = 0 \Rightarrow$$

$$n + 0 = n$$

مصفوفة

$$y = u + \varepsilon[u] \Rightarrow [u] = \frac{y-u}{\varepsilon}$$

$$[y] = [u + \varepsilon[u]] \Rightarrow y = [u] + \varepsilon[u] \Rightarrow [y] = \omega[u]$$

$$[y] = \omega \left(\frac{y-u}{\varepsilon} \right) \Rightarrow [y] = \frac{\omega}{\varepsilon} y - \frac{\omega}{\varepsilon} u \Rightarrow$$

$$\frac{\omega}{\varepsilon} u = \frac{\omega}{\varepsilon} y - [y] \Rightarrow$$

$$y = u - \frac{\varepsilon}{\omega} [u]$$

$$g(u) = 1 - \frac{\varepsilon}{\omega} [u]$$