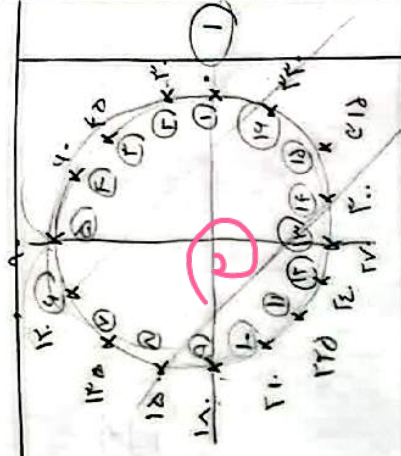


5.



① $\tan \alpha = 0$
 ② $\tan \alpha = \frac{1}{\sqrt{3}}$
 ③ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ④ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ⑤ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ⑥ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ⑦ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ⑧ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ⑨ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ⑩ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ⑪ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ⑫ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ⑬ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ⑭ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ⑮ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ⑯ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ⑰ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ⑱ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ⑲ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ⑳ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㉑ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㉒ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㉓ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㉔ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㉕ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㉖ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㉗ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㉘ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㉙ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㉚ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㉛ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㉜ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㉝ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㉞ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㉟ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㊱ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㊲ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㊳ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㊴ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㊵ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㊶ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㊷ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㊸ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㊹ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㊺ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㊻ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㊼ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㊽ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㊾ $\tan \alpha = \frac{1}{\sqrt{3}}$
 ㊿ $\tan \alpha = \frac{1}{\sqrt{3}}$

$$\frac{1}{\sqrt{2}} \begin{pmatrix} 1 \\ -i \end{pmatrix}$$

$$(2) \rightarrow \tan \frac{\pi}{4} = 1 \quad (3) \tan \theta = 0 \quad (4) \tan \frac{\pi}{2} = -1$$

$$(7) \tan \frac{\pi}{3} = \sqrt{3} \quad (1) \tan \frac{\pi}{4} = +\frac{\sqrt{3}}{3}$$

$$\textcircled{2} \quad \tan \frac{\pi}{4} = \frac{\sin \frac{\pi}{4}}{\cos \frac{\pi}{4}} = \frac{\frac{1}{\sqrt{2}}}{\frac{1}{\sqrt{2}}} = 1$$

$$\textcircled{12} \tan^{-1} \frac{\sqrt{3}}{1} = \sqrt{3}$$

ii) $\sin \frac{\pi}{\gamma} + \cos \pi + \tan \frac{\pi}{\gamma} = \sin \frac{\pi}{\gamma} + \cos \pi + \tan \frac{\pi}{\gamma} = \frac{1}{\gamma} - 1 + \gamma - 1 =$

$\frac{8}{1} \mid \frac{2}{1}$

$$1 - \cos \frac{\pi}{\theta} + \sin \frac{\pi}{\theta} - \sqrt{2} \sin \frac{\pi}{2} + \frac{\sqrt{2}}{2}$$

$$c) \cot \frac{\pi}{p} + r \cot \frac{\pi}{q} - r \tan \frac{\pi}{r} = -\sqrt{\frac{p}{q}} + \cancel{r \times \frac{\sqrt{3}}{2}} + \cancel{-\sqrt{\frac{p}{q}}} = -\sqrt{3} = -\frac{\sqrt{3}}{1}$$

$$\sin 18^\circ = \frac{1}{2} \Rightarrow \cos(90^\circ - 18^\circ) = \sin(90^\circ - 18^\circ) = 1$$

$f(x) = \begin{cases} x + \sqrt{x} \rightarrow x, \alpha \\ \Gamma x + \alpha + \Gamma - x \leq \alpha \end{cases}$

$$\cdot \alpha^T + \alpha - \gamma = 0$$

~~$(a+1)(a-1)=0$~~

$$0 \rightarrow (1) \xrightarrow{r} (1) \rightarrow (1) \rightarrow 0$$

$$a=1 \rightarrow \begin{cases} \rho_{k+\varepsilon n+n} \\ \rho_{k+\varepsilon n} \end{cases}$$

$$x + x = 2x$$

7
3
1

$$\frac{1}{2} \left(\frac{1}{2} + \frac{1}{2} \right) = \frac{1}{2}$$

1-2-1

$$D(r, b) = \frac{1}{2} \sqrt{1 + \frac{b^2}{r^2}} \left(\sqrt{1 + \frac{b^2}{r^2}} + 1 \right)$$

$$\sqrt{-\lambda} \leftarrow \sqrt{-\lambda} + \lambda \quad \cdot \quad \frac{1}{\sqrt{1+\lambda^2}} \leftarrow \frac{1}{\sqrt{1+\lambda^2}} + \lambda$$

$$|a + r\chi \rightarrow -r^* \zeta \chi \zeta - 1$$

1.

$$11 - b = a - 9 \rightarrow a + b = 11 + 9 = 20$$

100

[illegible]

$$\frac{1}{\lambda^2 - \lambda^2} = \frac{1}{0}$$

$$(3-x)^{14}$$

—

[illegible]

$$|x_1 + x_2 + \dots + x_n|$$

$\frac{A_2}{T}$

$$|x-y| \neq 0 \rightarrow [x \neq y \rightarrow x \neq -x]$$

—

Figure 1

ب-۸) $y = \sqrt{\frac{x^3 - 2x^2 - 5x + 4}{x^3 + 2x^2 - 5x - 4}}$ همه ضرایب صفر نقش پذیر بر (n-1) $\leadsto \frac{x^3 - 2x^2 - 5x + 4}{x^3 + 2x^2 - 5x - 4} \geq 0 \leadsto$ همه ضرایب نشان زوج و فرد برابر نقش پذیر بر (n+1)

$$\frac{(n-1)(n^2 - n - 4)}{(n+1)(n^2 + n - 4)} \geq 0 \leadsto \frac{(n-1)(n-3)(n+2)}{(n+1)(n+3)(n-2)} \geq 0 \leadsto$$

$\begin{array}{ccccccc} -3 & -2 & -1 & 1 & 2 & 3 \\ + & - & + & - & + & - & + \end{array}$

$\mathcal{D}_f = (-\infty, -3) \cup [-2, -1) \cup [1, 2) \cup [3, +\infty)$

ب-۱۰) $y = \sqrt{[x] - 4} + \sqrt{2 - [x]}$

$\xrightarrow{I \wedge II} \mathcal{D}_f = \emptyset$ همه عدای ناممکنه از ۴ بزرگتر و ۳ کمتر باشند

$\begin{cases} [x] - 4 \geq 0 \rightarrow x \geq 4 \text{ I} \\ \quad \quad \quad \hookrightarrow [x] \geq 4 \\ \\ [x] - 2 \leq 0 \rightarrow x < 3 \text{ II} \\ \quad \quad \quad \hookrightarrow [x] \leq 2 \end{cases}$