

$$\frac{\pi_1}{y} = \frac{\Delta}{r} \quad , \quad \frac{\pi r}{y} = \frac{1 + \sqrt{5}}{r} \quad \frac{S r}{S I} = \frac{\pi r y}{\pi_1 y} = \frac{y(1 + \sqrt{5})}{y \frac{\Delta}{r}} = \frac{r + r\sqrt{5}}{\Delta} \quad (1)$$



$$\frac{L}{x} = \frac{1+\sqrt{5}}{r} \Rightarrow L = \frac{1+\sqrt{5}}{r} x$$

$$x^r + y^r = \left(\frac{1+\sqrt{5}}{r} x\right)^r \Rightarrow x^r + y^r = \frac{1+\sqrt{5}}{r} x^r$$

$$y^r = \frac{r+\sqrt{5}}{r} x^r \Rightarrow \frac{x^r}{y^r} = \frac{r}{r+\sqrt{5}} = \frac{r}{\sqrt{5}+1} = \frac{r\sqrt{5}-r}{r} = \frac{\sqrt{5}-1}{r}$$

$$\sqrt{ra^r + \epsilon_s} \cdot r - ra \stackrel{(*)}{\Rightarrow} \cancel{ra^r} + \cancel{\epsilon_s} \cdot \cancel{ra^r} - \cancel{ra} + r \Rightarrow \overbrace{ra^r - ra}^x + \epsilon_s \quad (*)$$

$$a > r \Rightarrow \sqrt{\frac{a+r}{a-r}} = -r \cdot \frac{1}{\sqrt{a-r}} \Rightarrow a < r$$

$$a \leq \frac{r}{v} \Rightarrow \frac{1}{v} \geq \frac{1}{v} \quad GG \Rightarrow \frac{\frac{r}{v} \alpha + 1}{\frac{r}{v} \alpha} \leq \frac{\frac{q}{v}}{\frac{r}{v}} \leq \frac{q}{r} \leq \frac{r}{\alpha} \quad (a)$$

[illegible]

$$\Rightarrow \pi_1 \leq \frac{r_F + \sqrt{194}}{r} \quad , \quad \pi_2 \leq \frac{r_F - \sqrt{194}}{r}$$

$$\frac{1}{\sqrt{r-n}+r} + \frac{1}{\sqrt{r-n}-r} \leq \frac{r-n}{\Delta \sqrt{r-n}} \Rightarrow \frac{1}{t+r} + \frac{1}{t-r} \leq \frac{t^r}{\Delta t} \Rightarrow \frac{t-r+t+r}{t^2-r^2} \leq \frac{t^r}{\Delta t} \Rightarrow \frac{2t}{t^2-r^2} \leq \frac{t^r}{\Delta t} \Rightarrow \frac{2}{t-r} \leq \frac{t^{r-1}}{\Delta t} \Rightarrow \frac{2}{t-r} \leq \frac{t^{r-1}}{\Delta t} \quad (3)$$

$$t^2 \leq 14 \Rightarrow t \leq \pm \sqrt{14} \Rightarrow t > 0 \Rightarrow \sqrt{2-x} \leq \sqrt{14} \Rightarrow 2-x \leq 14 \Rightarrow x \geq -12 \Rightarrow \text{معادله تعمیم یافته}$$

$$\frac{1}{2^r} + \frac{1}{(1-x)^r} = \frac{150}{9} \Rightarrow \frac{(1-x)^r + 2^r}{2^r (1-x)^r} = \frac{150}{9} \Rightarrow \frac{2^r - 2^{r+1} + 2^r}{(2-x)^r} = \frac{150}{9} \Rightarrow \frac{2(2^r - 2^{r+1}) + 2^r}{(2-x)^r} = \frac{150}{9} \Rightarrow \frac{2(2^r - 2^{r+1}) + 2^r}{(2-x)^r} = \frac{150}{9}$$

$$\Rightarrow \frac{t+1}{t^2} \leq \frac{10}{9} \Rightarrow 1+t+9 \leq 10t^2 \Rightarrow 10t^2 - t - 9 \geq 0 \Rightarrow (t-1)(t+9) \geq 0 \Rightarrow t \geq 1 \text{ or } t \leq -9$$

$$t \leq n^r - n \leq \frac{n}{i} \Rightarrow n^r - n - \frac{n}{i} \leq 0 \xrightarrow{\Delta \geq 0} 5 \leq \frac{b}{a} \leq 1$$

$$t \leq n^r - n \leq \frac{n^r}{15} \Rightarrow n^r - n + \frac{n^r}{15} \leq 0 \Rightarrow S \leq \frac{-b}{a} \leq 1 \quad \left. \vphantom{\frac{n^r}{15}} \right\} 1 + 1 = 2$$

$$t \begin{cases} \frac{E\lambda}{140} \leq \frac{r}{10} \\ -\frac{r}{140} \leq -\frac{r}{14} \end{cases}$$

$$\sqrt{x + \sqrt{-x^2 + 4x - 1}} + \sqrt{x + \sqrt{-x^2 + 4x - 1}} = x + 1$$

$$+n^r(\varepsilon - n) - r_0(\varepsilon - n) \geq 0$$

$$-x^5 + 4x - 1 \geq 0$$

$$(n^r - \omega)(t - n) \geq -$$

$$x^2 - 4x + 4 \leq 0$$

$\pm \omega$ ϵ^c

$-\omega$	ϵ^c	ω
+	-	+
-	+	-

$\begin{array}{c} | \quad r \quad f \\ + \quad - \quad + \\ [r, f] \quad \textcircled{+} \end{array}$

حصار دہلیک جولیہ راجہ (۱۷۵۴ء)

① $\wedge P \Rightarrow \{f\} \Rightarrow \sqrt{f} + \sqrt{14} \leq 4 + f \leq 9$ GG

$$y \leq |x+2| + |x-1| \Rightarrow \begin{cases} x \geq 1 \Rightarrow x+2+x-1 \leq y \Rightarrow 2x+1 \leq y \\ -1 \leq x \leq 1 \Rightarrow x+2-x+1 \leq y \Rightarrow y \leq 3 \\ x \leq -1 \Rightarrow -x-2-x+1 \leq y \Rightarrow -2x-1 \leq y \end{cases}$$

$$y \leq -\frac{1}{2}x + \frac{1}{2}$$

(8)

$$x \geq 1 \Rightarrow x+2+x-1 \leq y \Rightarrow 2x+1 \leq y \Rightarrow x \leq \frac{y-1}{2} \Rightarrow 1 \leq \frac{y-1}{2} \Rightarrow y \geq 3$$

$$-1 \leq x \leq 1 \Rightarrow x+2-x+1 \leq y \Rightarrow y \leq 3$$

$$x \leq -1 \Rightarrow -x-2-x+1 \leq y \Rightarrow -2x-1 \leq y \Rightarrow x \leq -\frac{y+1}{2} \Rightarrow -1 \leq -\frac{y+1}{2} \Rightarrow y \leq -3$$

$$AB = \sqrt{(y_B - y_A)^2 + (x_B - x_A)^2} = \sqrt{(y - 0)^2 + (x - (-1))^2} = \sqrt{y^2 + (x+1)^2}$$

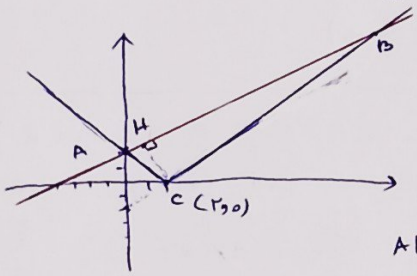
$$y \leq \sqrt{x^2 + x + 2} = \sqrt{(x+1/2)^2 + 7/4} = |x+1/2| \begin{cases} x \geq -1/2 \Rightarrow x+1/2 \leq y \\ x \leq -1/2 \Rightarrow -(x+1/2) \leq y \end{cases}$$

(9)

$$y \leq \frac{1}{2}x + 2$$

$$x \geq 0 \Rightarrow y \leq 2$$

$$y \leq 0 \Rightarrow x \leq -4$$



$$\begin{cases} x \geq 2 \Rightarrow x-2 \leq \frac{1}{2}x+2 \Rightarrow x-2 \leq \frac{1}{2}x+2 \Rightarrow x \leq 4 \Rightarrow GG \\ x \leq 2 \Rightarrow -x+2 \leq \frac{1}{2}x+2 \Rightarrow -x+2 \leq \frac{1}{2}x+2 \Rightarrow x \leq 0 \Rightarrow GG \end{cases}$$

B|2

A|2

$$h = \frac{\text{طول عمود}}{CH} = \frac{|0 - \frac{1}{2}(-1) - 2|}{\sqrt{1 + \frac{1}{4}}} = \frac{\frac{5}{2}}{\sqrt{\frac{5}{4}}} = \frac{\frac{5}{2}}{\frac{\sqrt{5}}{2}} = \frac{5}{\sqrt{5}} = \sqrt{5}$$

$$AB \leq y \leq \frac{1}{2}x + 2 \Rightarrow \frac{1}{2}(0) + 2 \leq y \leq 2$$

$$a \leq \frac{\Delta y}{\Delta x} \leq \frac{b}{a} \leq \frac{1}{a}$$

$$y \leq \frac{1}{2}x + 2$$

$$\Rightarrow S \leq \frac{AB \times h}{2} \leq \frac{\frac{5}{\sqrt{5}} \times \sqrt{5}}{2} \leq 12$$

$$AB = \sqrt{(1-(-1))^2 + (2-0)^2} = \sqrt{4+4} = \sqrt{8} = 2\sqrt{2}$$

$$\begin{cases} t_1 \leq t_2 - 9 \Rightarrow t_1 + 9 \leq t_2 \\ t_1 + t_2 \leq 20 \end{cases}$$

$$\Rightarrow \frac{1}{t_1+9} + \frac{1}{t_1} \leq \frac{1}{20} \Rightarrow \frac{t_1 + t_1 + 9}{t_1(t_1+9)} \leq \frac{1}{20} \Rightarrow t_1^2 + 9t_1 \leq 20t_1 \Rightarrow t_1^2 - 11t_1 \leq 0$$

(10)

(مجموعه سببی بار را در محاسبه انجام می دهد)

$$t_1^2 - 11t_1 \leq 0 \Rightarrow t_1(t_1 - 11) \leq 0 \Rightarrow \begin{cases} t_1 \leq 0 \\ 0 \leq t_1 \leq 11 \\ t_1 \geq 11 \end{cases}$$