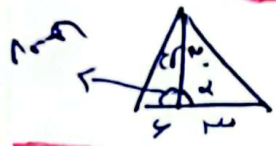


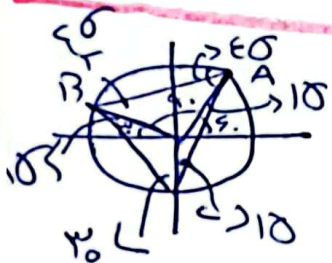
کامیاب صریحی روز رسم لیسر

$$OB T = OB^r = \tan^r \alpha + 1 \Rightarrow OB^r = \cot^r \alpha + 1 = \frac{1}{\sin^r \alpha} \Rightarrow OB = \frac{1}{\sin \alpha} - 1$$

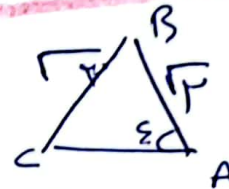
$$\Rightarrow AB = \frac{1}{\sin \alpha} - 1 = \frac{\sin \alpha - 1}{\sin \alpha}$$



$$\left. \begin{aligned} \frac{\sin 60}{r} &= \frac{\sin(180-\alpha)}{AB} \\ \frac{\sin 60}{r} &= \frac{\sin \alpha}{AC} \end{aligned} \right\} \Rightarrow \frac{AB}{AC} = \sqrt{r}$$



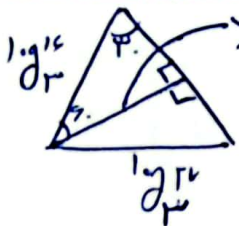
$$\begin{aligned} \sin 60 &= \frac{1}{r} \text{ شعاع } \Rightarrow AB = \sqrt{r} \\ \cos 60 &= \frac{1}{r} \text{ جیب } \end{aligned}$$



$$\frac{\sqrt{r}}{\sin 60} = \frac{BC}{\sin 45} = \frac{AC}{\sin 45} \Rightarrow S = \frac{r + \sqrt{r}}{r}$$

$$BC = \sqrt{r}, AC = \frac{\sqrt{r} + \sqrt{r}}{r}, AB = \sqrt{r}$$

$$\Rightarrow P \Rightarrow \frac{r}{r} + \frac{r}{r} + \frac{r}{r} = \frac{r + \sqrt{r} + \sqrt{r}}{r} = \frac{r + 2\sqrt{r}}{r} \checkmark$$



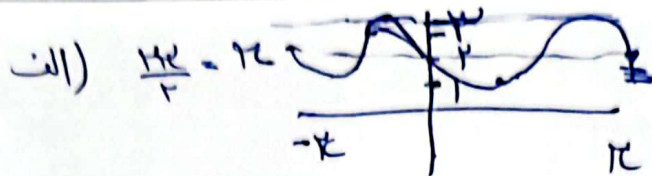
$$\Rightarrow CH = \sin^r \alpha \times \log^r \frac{1}{r} = r \log^r r$$

$$\Rightarrow \alpha =$$

$$r \cos^r \alpha - \cos^r \alpha - \sin^r \alpha (r \sin^r \alpha - 1) = r \cos^r \alpha - \cos^r \alpha - r \sin^r \alpha - \sin^r \alpha$$

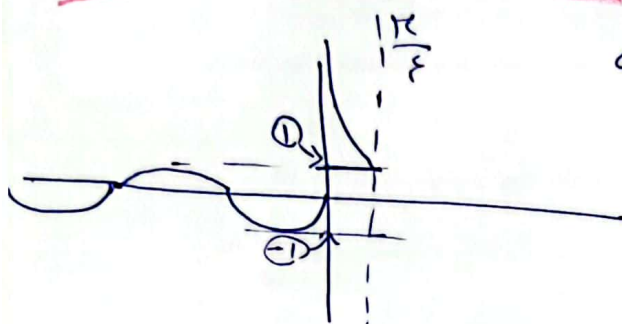
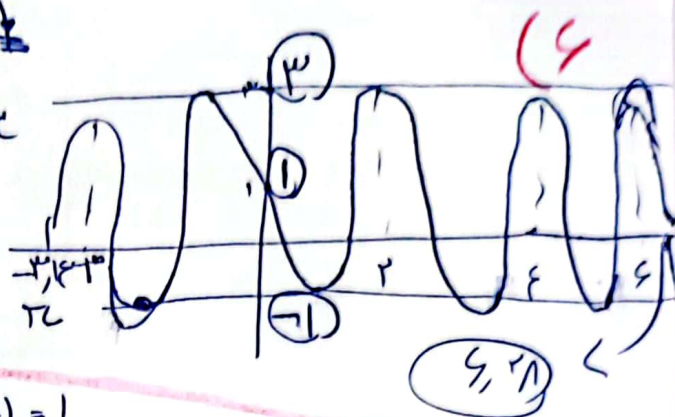
$$\frac{r \cos^r \alpha - r \sin^r \alpha - \cos^r \alpha - \sin^r \alpha}{r} = r \cos^r \alpha - 1 = 1$$

$$\Rightarrow \cos^r \alpha = 1 \Rightarrow \sin^r \alpha = 0$$



$$\frac{14\pi}{\pi} = 14 \quad -14 \sin(2x+1)$$

ج. 14 و 14



$$\cos(\frac{\pi}{2}) = 1$$

$$\Rightarrow R_f = [-14, \infty)$$

(V)

$$f(x) = a + b \sin(x) \cos(x) \cos(x) = f(x) = a + \frac{b}{2} \sin(2x) \cos(2x)$$

$$\Rightarrow a + \frac{b}{2} \sin(2x) \Rightarrow \max = 1 \Rightarrow \frac{b}{2} + a = 1 \Rightarrow a = 1$$

$$\Rightarrow T = \frac{2\pi}{\omega} = \frac{2\pi}{1} = 2\pi \Rightarrow \omega = 1$$

$$\Rightarrow -\frac{b}{2} + a = 0 \Rightarrow b = 2$$

$$\Rightarrow \frac{1}{2} \times \frac{2}{1} = 1$$

$$\frac{14\pi}{b} = 14 \Rightarrow b = 14 \quad a \cos(2x) + c$$

$$14 - (-14) = 28 \quad \frac{c}{14} = 1 \Rightarrow c = 14 \Rightarrow -14 = a$$

$$-14 \cos(2x) - 1 \Rightarrow 2 = \alpha \Rightarrow -14 \cos(2\alpha) - 1 = 0$$

$$\cos(2\alpha) = -\frac{1}{14} \Rightarrow \tan(2\alpha) = \frac{\sin(2\alpha)}{\cos(2\alpha)} \Rightarrow \frac{-\frac{\sqrt{195}}{14}}{-\frac{1}{14}} = \sqrt{195} \Rightarrow |\tan(2\alpha)| = \sqrt{195}$$

$$\sin(2\alpha) = 1 - \frac{1}{14} = \frac{13}{14} \Rightarrow \sin(2\alpha) = \frac{13}{14}$$

من دو نوبت 3 است پس مقدار $f(-\frac{3\pi}{4}, 0)$ را حساب کنید. 3 با جمع باید عدد

$$\Rightarrow f(-\frac{3\pi}{4}, 0) \Rightarrow f(+1, 0) \Rightarrow f(-\frac{3\pi}{4}, 0) = (\frac{1}{4})$$

$$(2, 0) \Rightarrow \frac{1-0}{2-1} = -1 \Rightarrow -\frac{1}{2} + 1 \Rightarrow -\frac{1}{2}(\frac{3}{2}) + 1 = (\frac{1}{4})$$