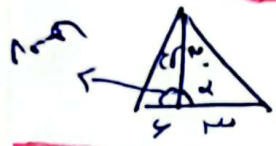


٢٥ کامیاب مرقی روز رسم لیسر

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

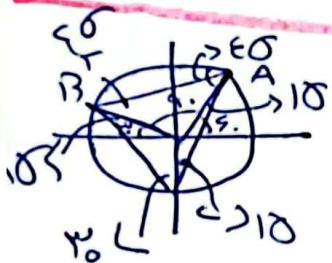
$$\Rightarrow AB = \frac{1}{\sin \alpha} - 1 = \frac{\sin \alpha - 1}{\sin \alpha} \checkmark$$



$$\frac{\sin 60}{r} = \frac{\sin(110 - \alpha)}{AB}$$

$$\frac{\sin 30}{r} = \frac{\sin \alpha}{AC}$$

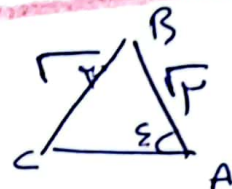
$$\Rightarrow \frac{AB}{AC} = \sqrt{r} \checkmark$$



$$\sin 180 = \frac{1}{r} \text{ شعاع}$$

$$\cos 90 = \frac{1}{r} \text{ عمود}$$

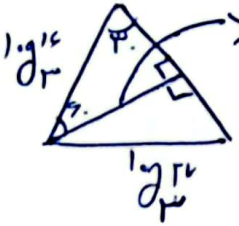
$$\Rightarrow AB = \sqrt{r}$$



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

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

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



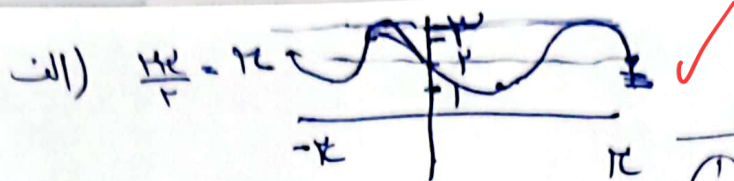
$$\Rightarrow CH = \sin^r \alpha \times \lg^r \frac{1}{r} = r \lg^r \frac{1}{r}$$

$$\Rightarrow \alpha =$$

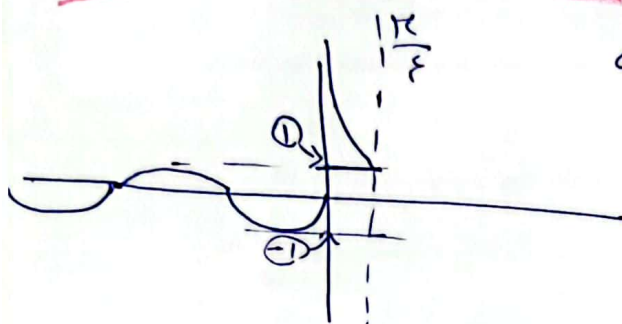
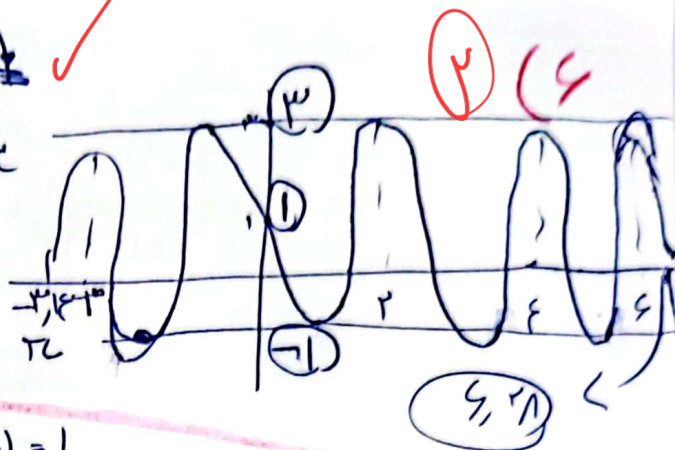
$$r \cos^r \alpha - \cos^r \alpha - \sin^r \alpha (r \sin^r \alpha - 1) = r \cos^r \alpha - \cos^r \alpha - r \sin^r \alpha - \sin^r \alpha$$

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

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



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



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

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

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

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

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

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

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

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

$14 - (-14) = 28 \Rightarrow \frac{c}{14} = 2 \Rightarrow c = 28$

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

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

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

من دو نوبت ۳ است پس مقدار $f(-\frac{3\pi}{4}, 0)$ را حساب کنید

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

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