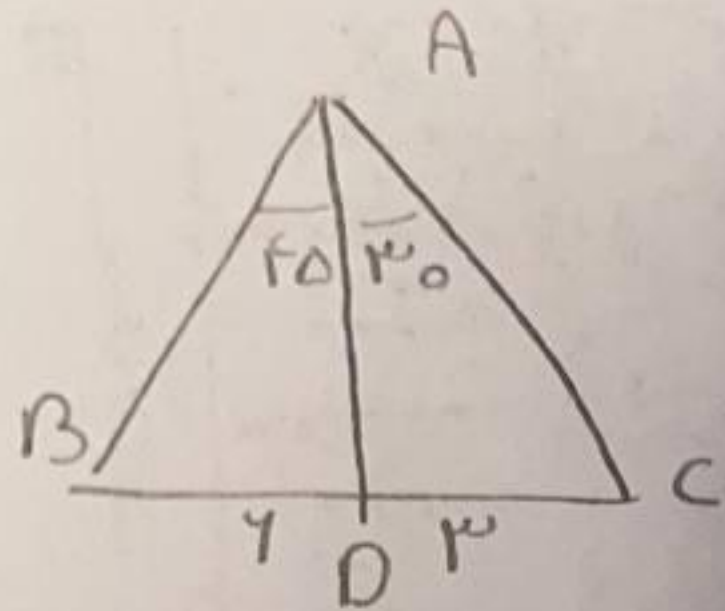




$$\frac{4}{\frac{\sqrt{2}}{2}} = \frac{AD}{\sin B}$$

$$\frac{3}{\frac{1}{2}} = \frac{AD}{\sin C}$$

$$4 \sin C = \frac{4 \cdot \frac{1}{2}}{\frac{\sqrt{2}}{2}} \sin B = AD$$

$$\sin C = \frac{\sqrt{2}}{2} \sin B$$

۱۷.۵

کیا یہی آسانی (۲)

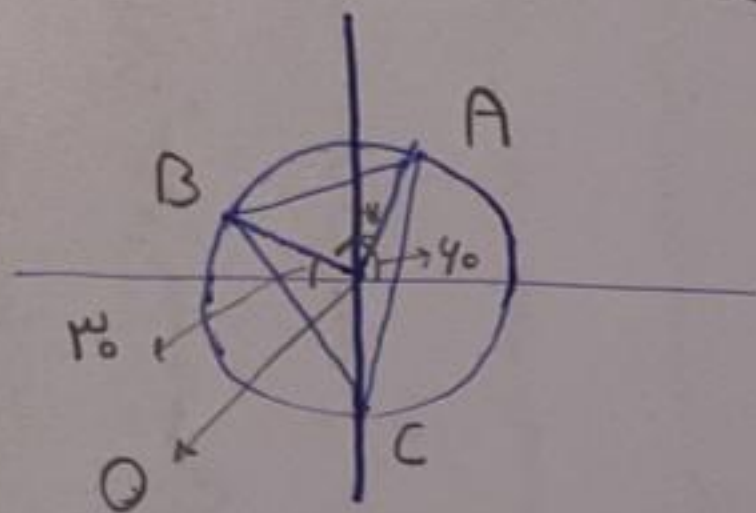
$$\frac{AB}{AC} = \frac{\frac{\sqrt{2}}{2}}{1} = \frac{\sqrt{2}}{2}$$

$$\frac{AB}{\frac{\sqrt{2}}{2} \sin B} = \frac{AC}{\sin A}$$

۲۱.۴

(۲)

الف)

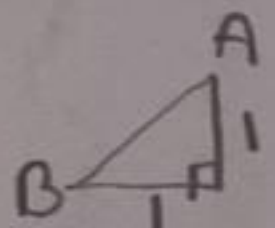


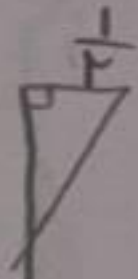
مساحات

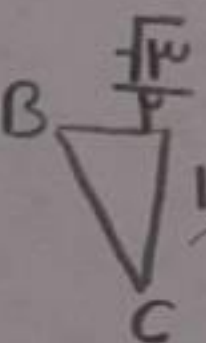
$$\left. \begin{aligned} S_{AOC} &= 1 \times \frac{1}{r} \times \frac{1}{r} = \frac{1}{r^2} \\ S_{BOC} &= \frac{1}{r} \times \frac{\sqrt{3}}{r} \times 1 = \frac{\sqrt{3}}{r^2} \\ S_{AOB} &= 1 \times 1 \times \frac{1}{r} = \frac{1}{r} \end{aligned} \right\}$$

$$S_{\text{ش}} = \frac{1 + \sqrt{3}}{r^2}$$

ب)

AB →  AB = $\sqrt{2}$

AC →  AC = $\sqrt{1 + \frac{1}{r^2}}$

BC →  BC = $\sqrt{\frac{2}{r^2}}$

$$P_{\text{ش}} = \sqrt{2} + \sqrt{2} + \sqrt{\frac{2}{r^2}}$$

2

برای بررسی
آورن باقی
مانده

تایید
cosa

$$\frac{\cos^r a + \cos^r a}{r \cos^r a - \cos^r a} \sin^r(a) (r \sin^r a - 1) - \cos^r a$$

$$\cos^r a + \cos^r a (\cos^r a - 1) - \sin^r a$$

$$\rightarrow \cos^r a - \sin^r a (\cos^r a - \cos^r a) = \cos^r a - \sin^r a$$

$$\frac{-\cos^r a + 1}{\sin^r a}$$

$$\begin{cases} \cos^r a - \sin^r a = 1 \\ \sin^r a + \cos^r a = 1 \end{cases}$$

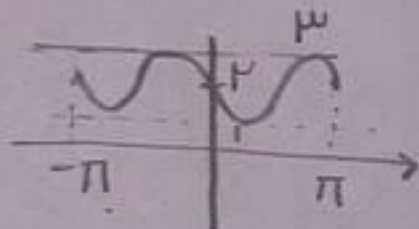
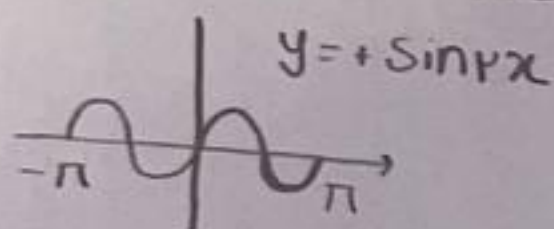
(7)

$$\rightarrow \sin a = 0 \rightarrow \boxed{\sin r a = 0} \checkmark$$

$$r \cos^r a = r \rightarrow \cos a = \pm 1$$

الف) $y = -r \sin x \cos x + r$ $[-\pi, \pi]$

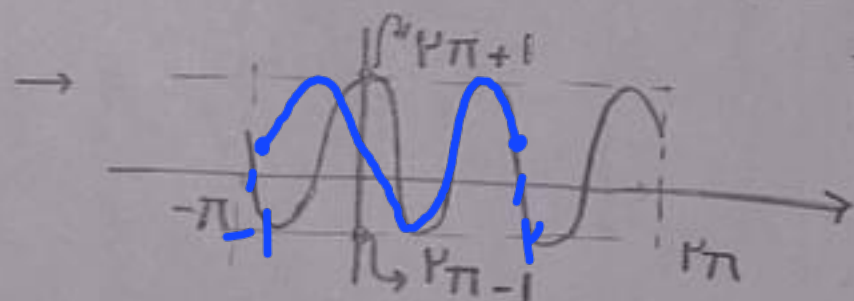
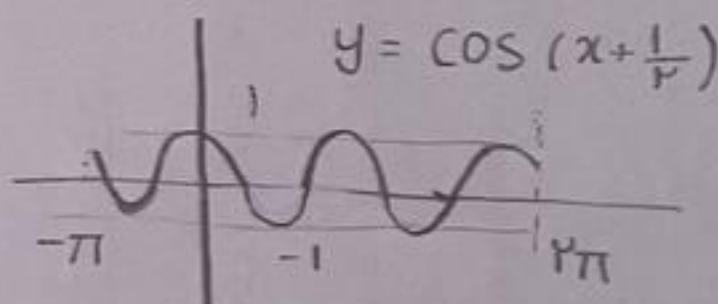
$$T = \frac{r\pi}{|b|} = \pi \checkmark$$



$$y = -\sin rx + r$$

(10)

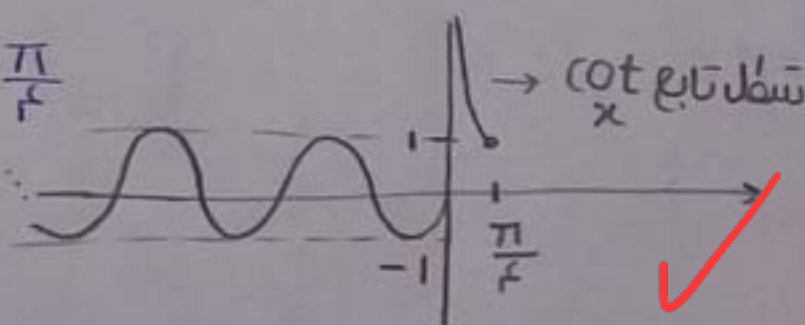
ب) $y = r \cos(x + \frac{1}{r})\pi + 1$ $[-\pi, r\pi]$



$$T = \frac{r\pi}{|b|} = r\pi$$

$$r\pi \cos(x + \frac{1}{r}) + 1$$

$$f(x) = \begin{cases} \cot x & 0 < x < \frac{\pi}{r} \\ \sin x & x \leq 0 \end{cases}$$



$$R_f = [-1, +\infty)$$

(7)

$$f(x) = a + b \sin(cx) \cos(cx) \cos(rx)$$

$$\frac{1}{r} \sin(rx)$$

$$\left(\frac{b}{r}\right) \sin(rx)$$

$$a = r$$

و اگر با آن آید

$$\frac{b}{r} = r \rightarrow b = r^2$$

$$\frac{r-0}{r}$$

$$\frac{r\pi}{|rc|} = \frac{\omega\pi}{\frac{\pi}{r}} = \frac{r\pi}{\omega}$$

$$rc = \omega \rightarrow c = \frac{\omega}{r}$$

$$\frac{bc}{a} = \frac{r \times \frac{\omega}{r}}{r} = \omega$$

(7)

$$f(x) = a \cos bx + c$$

$$\frac{(1 - (-4))}{2} = 3 \rightarrow a = -3$$

شکل $\cos x$
نسبت به محور x
قرینه شده

$$\frac{2\pi}{b} = \pi \rightarrow b = 2$$

$$-3 \cos 2x - 1 = 0 \rightarrow \cos 2x = -\frac{1}{3}$$

$$\sin 2x = \sqrt{1 - \frac{1}{9}} = \pm \frac{\sqrt{8}}{3}$$

$$|\tan 2x| = \frac{\frac{\sqrt{8}}{3}}{-\frac{1}{3}} = -\sqrt{2}$$

$$-3\pi, \omega \xrightarrow{+1} -3\pi, \omega$$

از اینجا که دوره تناوب ۳ است و ۱۱ بار تکرار شده

$$-3\pi, \omega + 3\pi = -\pi, \omega$$

یعنی از انتهای شکل اصلی $\frac{1}{3}$ عقب
بزرگتریم $x = 1, \omega$

جواب آخر

$$y = -\frac{1}{2}x + 1 \rightarrow x = \frac{3}{2} \rightarrow y = -\frac{3}{4} + 1 = \frac{1}{4}$$

معادله
آن قسمت از شکل