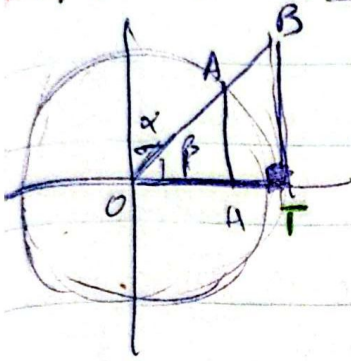


المجلس الأعلى

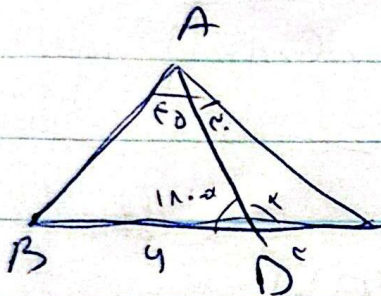
1. ملوحد
سوال



$$\alpha + \beta = 90^\circ \rightarrow \sin \beta = \cos \alpha$$

$$\frac{AH}{BT} = \frac{AH}{OT} = \frac{OA}{OP} \rightarrow \frac{\sin \beta}{1} = \frac{1}{1+AB}$$

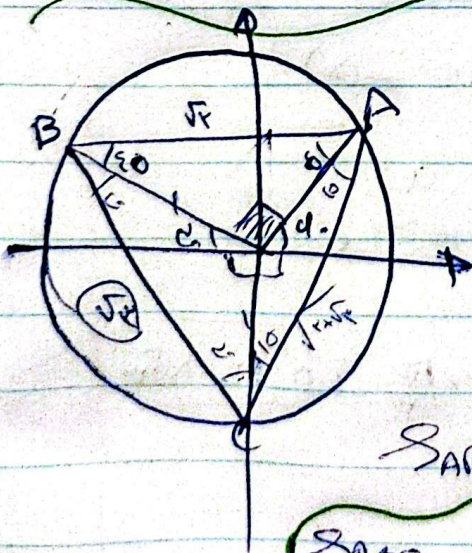
$$\sin \beta + AB \sin \alpha = 1 \rightarrow AB = \frac{1 - \sin \alpha}{\sin \alpha}$$



$$\frac{AL}{\sin \alpha} = \frac{r}{\sin C} \Rightarrow \frac{AC}{\sin \theta} = r$$

$$C \frac{AB}{\sin(m-\alpha)} = \frac{9}{\frac{\sqrt{5}}{5}} = 9\sqrt{5}$$

$$\frac{AB}{Ac} \rightarrow \frac{\frac{AB}{\sin \alpha}}{\frac{AR}{\sin \alpha}} = \frac{\sqrt{r}}{r} = \sqrt{r}$$



$$AB = \sqrt{1+1} = \sqrt{2}$$

$$BC = \sqrt{1+1 - 2 \times \frac{1}{\sqrt{2}} \times 1} = \sqrt{2}$$

$$AC = \sqrt{r+1 - \frac{r \times \sqrt{r}}{r} + 1} = p \sqrt{r+1}$$

$$S_{ABC} = \frac{1}{2} ab \sin C \Rightarrow \frac{1}{2} \times \frac{\sqrt{r}}{r} \times \sqrt{r} \times \sqrt{r + \sqrt{r}}$$

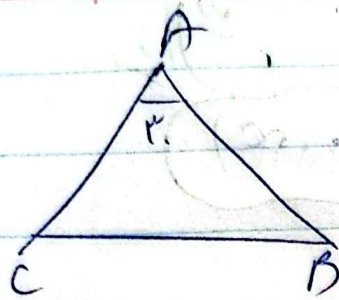
$$S_{A|X} = \frac{\sqrt{4} \times \sqrt{5+5}}{2}$$

$$\sqrt{x} + \sqrt{y} + \sqrt{x} + \sqrt{y}$$

آن سہا برای مصائب مسافت خیر خوبه ۱۱

الف اسم من راه پستخانه

اعمالِ اذہبِ کونستہ (راہِ تسمیہ تر)



$$\frac{1}{r} \text{ At } \sin w \Rightarrow \frac{1}{r} \log \frac{r}{v} \log \frac{v}{w} \text{ sine}$$

$$\frac{1}{r} \times \frac{1}{r} \times \log \frac{r}{v} \times \log \frac{v}{w} = \boxed{r}$$

$$n^2(n^2 - 1) - \sin^2(\alpha)(\cos^2 \alpha - 1) = n^2(n^2 - 1) + \sin^2 \alpha \cos^2 \alpha$$

$$\leftarrow X - \cos^2 \alpha \rightarrow X$$

$$u \rightarrow \cos \alpha$$

$$\cos^2 \alpha (\cos^2 \alpha - 1) + \sin^2 \alpha \cos^2 \alpha = \cos^2 \alpha \cos^2 \alpha + \sin^2 \alpha \cos^2 \alpha$$

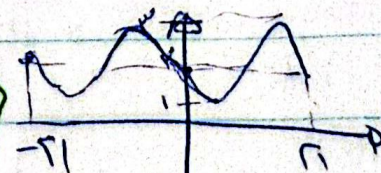
$$1 + \cos^2 \alpha = \cos^2 \alpha (\sin^2 \alpha + \cos^2 \alpha) = \boxed{\cos^2 \alpha = 1}$$

$$1 - \cos^2 \alpha = \sin^2 \alpha \rightarrow 1 - 1 = 0 \rightarrow \boxed{\sin^2 \alpha = 0}$$

$$c) - r \sin(\omega t + \frac{\pi}{2}) \rightarrow -r \times \frac{1}{r} \sin(\omega t + \frac{\pi}{2})$$

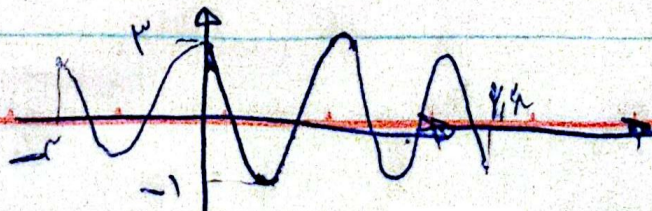
$$r = \sin \omega t$$

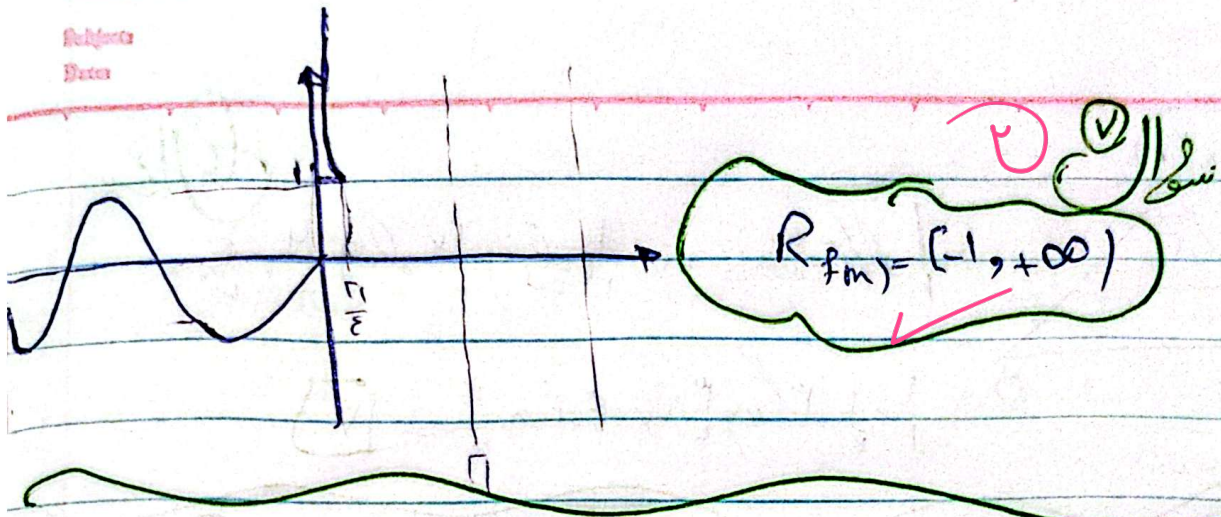
$$\rightarrow T = \frac{2\pi}{f} = \pi$$



$$\rightarrow r \cos(\omega t + \frac{\pi}{2}) \rightarrow r \cos(\omega t + \frac{\pi}{2}) \rightarrow 1 - r \sin(\omega t)$$

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





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

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

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

$$T = \frac{2\pi}{1} - \frac{\pi}{1} \Rightarrow \frac{\pi}{\pi} = \frac{\pi}{\pi} \Rightarrow C = \frac{a}{\varepsilon}$$

$$a + \frac{b}{r} = (r)$$

$$a = (r)$$

$$b = \frac{\varepsilon - \infty}{r} \Rightarrow (r)$$

$$\frac{bc}{a} = \frac{\frac{a}{r} \times r}{r} \Rightarrow \left[\frac{a}{\varepsilon} \right]$$

$$a \cos(x) + b \sin(x) + c$$

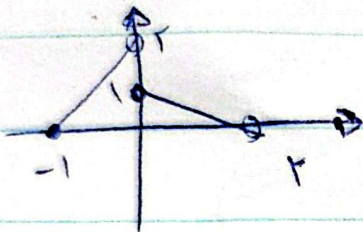
$$T = \frac{r\pi}{|b|} = \pi \rightarrow |b| = r \rightarrow b = \pm r$$

$$c + |a| = r, c - |a| = -\varepsilon \rightarrow c = -1$$

$$r \cos(x) - 1 \rightarrow r \cos(x) = 1 \rightarrow \cos(x) = \frac{1}{r}$$

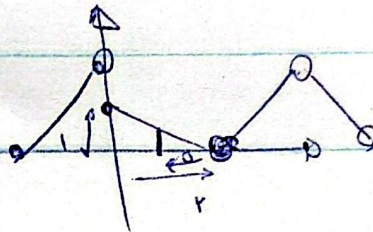
$$|\sin(x)| = 1 - \frac{1}{a} = \frac{\sqrt{a}}{a} \quad |\tan(x)| = \left| \frac{\sqrt{a}}{a} \right| \Rightarrow \left[\frac{\sqrt{a}}{a} \right]$$

10
15



$$f(1-\sqrt{2}, 0) = f(1-\sqrt{2}, 1-\sqrt{2})$$

$$(1-\sqrt{2}) = -\sqrt{2}$$

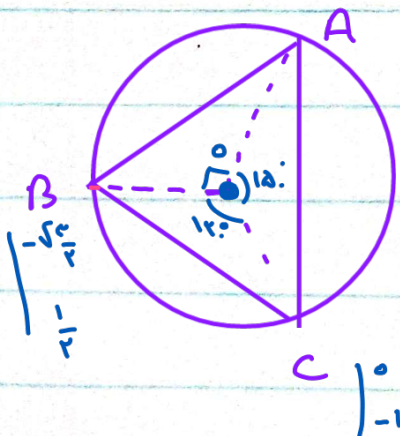


$$\frac{1}{\sqrt{2}} \times \frac{1}{\sqrt{2}} = \frac{1}{2}$$

$$f(1-\sqrt{2}, 0) = \frac{1}{\sqrt{2}}$$



قسمت الف سوال 3



$$SAOC = 1 \times 1 \times \frac{1}{\sqrt{2}} \times \frac{1}{\sqrt{2}} = \frac{1}{2}$$

$$SOAR = 1 \times 1 \times \frac{1}{\sqrt{2}} = \frac{1}{\sqrt{2}}$$

$$SOBC = 1 \times 1 \times \frac{1}{\sqrt{2}} \times \frac{\sqrt{2}}{2} = \frac{\sqrt{2}}{2}$$

$$S_{ABC} = \frac{1}{2} + \frac{1}{\sqrt{2}} + \frac{\sqrt{2}}{2} = \frac{1+\sqrt{2}}{2}$$