

$$\text{Cell} \rightarrow \frac{D}{1n_1} = \frac{\text{rad}}{\pi} \rightarrow \frac{rV}{1n_1} = \frac{\text{rad}}{\pi} \rightarrow \frac{rVx}{1n_1} = \frac{rx}{r_0}$$

$$\text{ب) } 12\omega = (21)\text{rad} \rightarrow \frac{12\omega}{1n_1} = \frac{\text{rad}}{\pi} \rightarrow \frac{12\omega\pi}{1n_1} = \frac{21\pi}{r_0}$$

$$\text{ج) } \frac{\omega\pi}{12} \text{ rad} = (21)^\circ \rightarrow \frac{21}{1n_1} = \frac{\omega\pi}{\frac{12}{\pi}} \rightarrow \frac{21}{1n_1} = \frac{\omega}{12} \rightarrow \frac{\omega \times 1n_1}{12} = 21^\circ$$

$$\text{د) } \frac{fx}{9} \text{ rad} = (21)^\circ \rightarrow \frac{21}{1n_1} = \frac{fx}{\frac{9}{\pi}} \rightarrow \frac{21}{1n_1} = \frac{f}{9} \rightarrow \frac{fx \times 1n_1}{9} = 21^\circ$$

$$\text{با}^\circ, \frac{12\omega a}{9} \text{ د}^\circ, \frac{ax}{9} \text{ (Unit)} \Rightarrow \frac{12\omega a}{9} = \frac{D}{1n_1} \rightarrow \frac{12\omega a}{9 \times 1n_1} = \frac{D}{1n_1}$$

$$\frac{ax}{9} = \frac{D_r}{1n_1} \rightarrow \frac{a}{9} = \frac{D_r}{1n_1} \rightarrow D_r = \frac{1n_1 a}{9} = \frac{f\omega a}{r} \quad D_1 = \frac{1n_1 \times 12\omega a}{9} = \frac{12\omega a}{9} = \frac{r\omega a}{r}$$

$$1a + \frac{f\omega a}{r} + \frac{r\omega a}{r} = 1n_1 \rightarrow \frac{4\omega a}{r} = 1n_1 \rightarrow f\omega a = 1n_1 \rightarrow \boxed{a = f^\circ}$$

$$\text{15) Cell) } \cos 9^\circ \cos 5^\circ - \sin 9^\circ \sin 5^\circ - \tan 5^\circ + \cot 5^\circ =$$

$$\left(\frac{1}{r} \times \frac{\sqrt{r}}{r}\right) - \left(\frac{\sqrt{r}}{r} \times \frac{1}{r}\right) - 1 + r = \frac{\sqrt{r}}{r} - \frac{\sqrt{r}}{r} + 1 = 1 \quad \text{--- (1)}$$

$$\text{ب) } \frac{\tan 5^\circ - \tan 9^\circ + \tan 4^\circ}{\cot 5^\circ - \cot 4^\circ} = \frac{\frac{r}{9} - 1 + \frac{r}{r}}{\frac{\sqrt{r}}{r} - \frac{\sqrt{r}}{r}} = \frac{\frac{r}{9}}{\frac{\sqrt{r}}{r}} = \frac{\frac{r}{9} \times \frac{r}{\sqrt{r}}}{\frac{\sqrt{r}}{r}} = \frac{r}{\sqrt{r}} \times \frac{\sqrt{r}}{r} = \frac{\sqrt{r}}{r} \times \frac{\sqrt{r}}{r} = \frac{\sqrt{r}}{r}$$

$$- \sin 5^\circ \cos 9^\circ + \cos 5^\circ \sin 9^\circ = \sin \theta \rightarrow \sin(a+b) \text{ کی خاصیت}$$

$$\left(-\frac{1}{r} \times \frac{1}{r}\right) + \left(\frac{\sqrt{r}}{r} \times \frac{\sqrt{r}}{r}\right) = -\frac{1}{r} + \frac{r}{r} = \frac{r}{r} = 1 \quad \sin \theta = 1$$

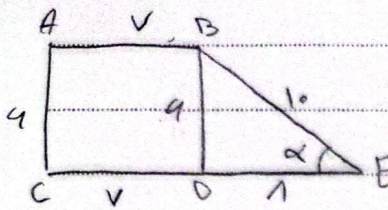
$$\sin \theta = \frac{\sqrt{r}}{r} \quad \sin A = \frac{1}{\sqrt{r}} \times \frac{\sqrt{r}}{r} = \frac{\sqrt{r}}{r}$$

$$\tan 5^\circ \text{ --- (1) } \quad \text{میں نے مارے ہیں وہ 5^\circ کی خاصیت، } \tan 5^\circ \text{ کی خاصیت 1 ہے۔}$$

$$\frac{r \tan 5^\circ (1 - \tan 5^\circ)}{(1 - \cot 5^\circ)^r} = \tan \theta \rightarrow \frac{\frac{r\sqrt{r}}{r} \times \left(1 - \frac{1}{r}\right)}{\left(1 - \frac{1}{r}\right)^r} = \frac{\frac{r\sqrt{r}}{r}}{\frac{r}{r}} = \frac{r\sqrt{r}}{r} = \sqrt{r}$$

$$\tan \theta = \sqrt{r} \rightarrow \theta = 45^\circ \quad \frac{45^\circ}{1n_1} = \frac{\text{rad}}{\pi} \rightarrow \frac{45\pi}{1n_1} = \boxed{\frac{1}{r} \pi}$$

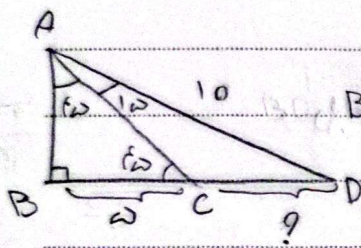
$$\tan A = \frac{r \sin A - \cos A}{\sin A - r \cos A} \Rightarrow \frac{r \tan A - 1}{\tan A - r} = \frac{10 - 1}{10 - r} = \frac{1r}{1} = 10$$



$$BD = \sin \alpha \times \vec{r} = 9 \rightarrow \frac{9}{10} \times \vec{r} = 9 \Rightarrow \vec{r} = 10$$

$$100 = 34 + 2r \rightarrow 2r = 66 \rightarrow r = 33$$

$$\text{perimeter} = 4 + 10 + 1 + 4 + 33 = 52$$



$$BD = \sin 40^\circ \times \vec{r} = \frac{\sqrt{3}}{2} \times 10 = 5\sqrt{3}$$

$$\cot 40^\circ = 1 \rightarrow \frac{1 - BC}{AB} \rightarrow \frac{BC}{10} = 1 \Rightarrow BC = 10$$

$$AB = 10 \times \sin 40^\circ = 10 \times \frac{1}{2} = 5$$

الف) نامعلوم
ب) نامعلوم

$$\tan \alpha = \frac{1}{r} \rightarrow 1 + \cot \alpha = \frac{1}{\sin \alpha} \rightarrow 1 + 9 = \frac{1}{\sin \alpha} \rightarrow 10 = \frac{1}{\sin \alpha}$$

$$\cot \alpha = r$$

$$\sin \alpha = \frac{1}{10} \rightarrow \sin \alpha = \pm \frac{1}{10}$$

$$\sin \alpha = \frac{-\sqrt{10}}{10}$$

چون سناہ ۱۳ است و ۱۰ است و باید منفی باشد