

(الف) $\frac{2V}{1A} = \frac{? \text{ rad}}{\pi} \Rightarrow \frac{2V \pi}{1A} = \frac{4}{10} \pi \Rightarrow 1 < \Delta \times \frac{\pi}{1A} = \frac{2A \pi}{10} \Rightarrow \frac{?}{1A} = \frac{2A}{10} \Rightarrow \frac{1A \times \Delta}{10} = \frac{2A}{10} \Rightarrow \Delta = 2^\circ$

(ب) $\frac{1.5a}{100} = \frac{3}{1A} \Rightarrow \frac{1A \times 1.5a}{100} = 1.17a \Rightarrow \frac{a}{100} \times \frac{1A}{100} = 1.17a \Rightarrow 1A = 100 \Rightarrow a = 100$

(الف) $\frac{1}{r} \times \frac{\sqrt{r}}{r} - \frac{\sqrt{r}}{r} \times \frac{1}{r} - 1 + r = 1 \Rightarrow \frac{1}{r} + 1 + r = \frac{1}{r} \times \frac{r}{\sqrt{r}} = \frac{1}{\sqrt{r}}$

$-\frac{1}{r} \times \frac{1}{r} + \frac{\sqrt{r}}{r} \times \frac{\sqrt{r}}{r} = \sin^2 \theta = \frac{1}{r} \Rightarrow \sin \theta = \frac{\sqrt{r}}{r} \Rightarrow \sin^2 \theta + \cos^2 \theta = 1 \Rightarrow \cos \theta = \frac{\sqrt{r}}{r}$

$\frac{r\sqrt{r}}{r} (1 - \frac{r}{r}) = \frac{r\sqrt{r}}{r} \times \frac{r}{r} = \sqrt{r} = \tan \theta \Rightarrow \tan 45^\circ = \sqrt{r} \Rightarrow \theta = 45^\circ$

$\frac{r \sin \theta - \cos \theta}{\sin \theta - \epsilon \cos \theta} = \frac{r \times 1 - 1}{1 - \epsilon} = 14 \Rightarrow \tan \theta = 14$

$\sin \alpha = \frac{4}{10} \Rightarrow \alpha = 21.5^\circ \Rightarrow n = 1$

$\sin 45^\circ = \frac{\sqrt{r}}{r} = \frac{BD}{10} \Rightarrow BD = 5\sqrt{r}$
 $\cos 45^\circ = \frac{1}{r} = \frac{AB}{10} \Rightarrow AB = 5$
 $\tan 45^\circ = 1 = \frac{AB}{BC} \Rightarrow AB = BC = 5$
 $BD - BC = CD \Rightarrow 5\sqrt{r} - 5 = CD$

$\sin \theta$ ← صفر یا - ← کماؤ
 $\cos \theta$ ← 1 ← صفر ← افزائش

(9) الف) ناصیہ سوم

ب) ناصیہ دوم
 $\sin \theta$ ← 1 ← 0 ← کماؤ
 $\cos \theta$ ← 0 ← -1 ← کماؤ

$\tan \alpha = \frac{1}{4}$ ، ناصیہ سوم $\Rightarrow \sin \alpha$ ؟

$\Rightarrow \tan \alpha \cdot \cot \alpha = 1 \Rightarrow \cot \alpha = 4$

$$\cot^2 \alpha + 1 = \frac{1}{\sin^2 \alpha}$$

$$\Rightarrow 10 = \frac{1}{\sin^2 \alpha} \Rightarrow \sin^2 \alpha = \frac{1}{10} \Rightarrow \sin \alpha = \pm \frac{1}{\sqrt{10}} = \boxed{-\frac{\sqrt{10}}{10}}$$

← ناصیہ دوم