

(الف)

$$\frac{D}{180} = \frac{\text{Rad}}{\pi} \Rightarrow \frac{3}{180} \times \pi = \text{Rad} = \frac{3\pi}{60}$$

(ب)

$$\frac{180}{180} \times \pi = \frac{180\pi}{180}$$

(ج)

$$\frac{180\pi}{180} \div \pi = \frac{D}{180} \Rightarrow D = 900 \Rightarrow D = \frac{900}{180} = 50^\circ$$

(د)

$$\frac{5\pi}{9} \div \pi = \frac{D}{180} \Rightarrow 9D = 540 \Rightarrow D = 60^\circ$$

$$\frac{D}{180} = \frac{G}{900} = \frac{\text{Rad}}{\pi} \Rightarrow \frac{180a}{9} = \frac{5a}{\sqrt{3}} \Rightarrow \sqrt{3}D = 900a \Rightarrow D = 1218a$$

$$\frac{a\pi}{180} = \frac{a}{180} \Rightarrow 18D = a180 \Rightarrow D = a \frac{180}{180} \Rightarrow D = 1218a$$

$$1 \cdot a + 1218a + 1218a = 48a = 180^\circ \Rightarrow a = 3.75^\circ$$

(الف)

$$\frac{1}{\sqrt{3}} \times \frac{\sqrt{3}}{2} - \frac{\sqrt{3}}{2} \times \frac{1}{\sqrt{3}} - \frac{1}{1} \times \frac{1}{1} = -1$$

(ب)

$$\frac{-\frac{1}{\sqrt{3}} + \frac{\sqrt{3}}{2} + \frac{\sqrt{3}}{2} - \frac{1}{\sqrt{3}}}{\frac{1}{\sqrt{3}} \times \frac{\sqrt{3}}{2} - \frac{\sqrt{3}}{2} \times \frac{1}{\sqrt{3}} - \frac{1}{1} \times \frac{1}{1}} = \frac{13\sqrt{3}}{6}$$

$$\left(-\frac{1}{\sqrt{3}} \times \frac{1}{\sqrt{3}}\right) + \left(\frac{\sqrt{3}}{2} \times \frac{\sqrt{3}}{2}\right) = \frac{2}{3} = \sin^2 \theta \Rightarrow \sin \theta = \frac{1}{\sqrt{3}} \Rightarrow \cos \theta = \frac{\sqrt{3}}{2} \Rightarrow$$

$$\tan \theta = \frac{\sin \theta}{\cos \theta} = \frac{\frac{1}{\sqrt{3}}}{\frac{\sqrt{3}}{2}} = \frac{1}{3} \rightarrow \theta = 3.0^\circ$$

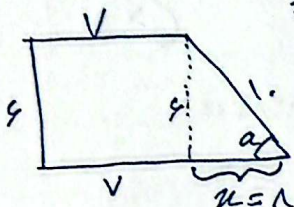
$$\frac{\frac{1}{\sqrt{3}} \times \left(1 - \frac{1}{3}\right)}{\left(1 - \frac{1}{3}\right) \times \frac{1}{\sqrt{3}} - \frac{1}{\sqrt{3}} \times \frac{1}{\sqrt{3}}}$$

$$= \frac{\frac{1}{\sqrt{3}} \times \frac{2}{3}}{\frac{2}{3} - \frac{1}{3}} = \frac{\frac{2}{3\sqrt{3}}}{\frac{1}{3}} = \frac{2}{\sqrt{3}} = \tan \theta = \sqrt{3} \rightarrow \tan 60^\circ$$

$$60 = \frac{\pi}{3}$$

$$\delta \cos \Theta = \sin \Theta$$

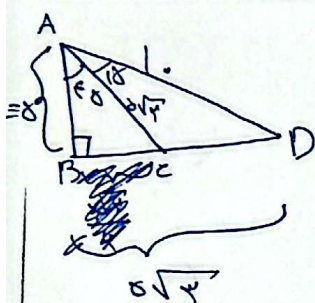
$$\frac{18 \cos \theta - \cos \theta}{8 \cos \theta - f \cos \theta} = \frac{1 \cancel{\cos \theta}}{\cancel{\cos \theta}} = 1 f$$



$$\sin a = \frac{y}{1}$$

$$1. r = 44 + n^2 \rightarrow n = 1$$

$$V + Y + V + \Lambda + I_0 = \boxed{3\Lambda}$$



$$\sin \theta = \frac{\sqrt{r}}{r}$$

$$\sin \theta = \frac{\sqrt{3}}{2} = \frac{BP}{AD} = \frac{8\sqrt{3}}{16}$$

$$\cos \delta = \frac{\sqrt{r}}{r} = \frac{\delta}{AC} \Rightarrow AC = \delta \sqrt{r}$$

$$\frac{\sqrt{r}}{r} = \frac{BC}{8\sqrt{r}} \Rightarrow BC = 8$$

$$BD - BC = CD \Rightarrow 8\sqrt{3} - 8 = 8(\sqrt{3} - 1) \rightarrow CD$$

$$1 \dots = v\delta + n^2 \rightarrow n = \delta$$

الف) ناصبی سوم

(ب) نامی دوم

$$\psi \sin \alpha = \cos \alpha \rightarrow \alpha = 30^\circ \quad \text{جواب}$$

$$\bar{\rho} = \sqrt{1^2 + 3^2} = \sqrt{1+9} = \sqrt{10}$$

$$\sin \alpha = \frac{\text{مقابل}}{\text{مقدار}} = \frac{1}{\sqrt{10}} = \frac{\sqrt{10}}{10}$$