

$12) \quad 2V^\circ = (n) \text{ rad}$
 $\frac{2V}{1n_0} = \frac{\text{Rad}}{\pi}$
 $\text{Rad} = 2V \times \frac{\pi}{1n_0} = \frac{2\pi}{10}$

$4) \quad 125^\circ (n) \text{ rad}$
 $\frac{125}{1n_0} = \frac{\text{Rad}}{\pi}$
 $\text{Rad} = 125 \times \frac{\pi}{1n_0} = \frac{25\pi}{4}$

$5) \quad \frac{5\pi}{12} \text{ Rad} = (n)^\circ$
 $\frac{5\pi}{12} = \frac{n}{1n_0}$
 $n = \frac{5\pi}{12} \times \frac{1n_0}{\pi} = 75$

$6) \quad \frac{4\pi}{9} \text{ rad} = (n)^\circ$
 $\frac{4\pi}{9} = \frac{n}{1n_0}$
 $n = \frac{4\pi}{9} \times \frac{1n_0}{\pi} = 100$

$7) \quad \frac{125a}{9} = \frac{\square}{1n_0}$
 $\square = \frac{125 \times 1n_0}{100} = 125a$

$\frac{a\pi}{\pi} = \frac{125a}{1n_0}$
 $125a = 1n_0 \times a = 22,5a$

$22,5a + 125a = 1n_0$
 $147,5a = 1n_0$
 $a = 7^\circ$

$8) \quad \cos 40^\circ \cos 30^\circ - \sin 40^\circ \sin 30^\circ - \tan 40^\circ + 2 \cot 40^\circ = 1$

$\frac{1}{2} \times \frac{\sqrt{3}}{2} - \left(\frac{\sqrt{3}}{2} \times \frac{1}{2} \right) - 1 + 2$

$\tan 40^\circ + \tan 40^\circ + \tan 40^\circ = \frac{(\frac{\sqrt{3}}{2})^2 + 1 + (\frac{\sqrt{3}}{2})^2}{\frac{\sqrt{3}}{2} - \frac{\sqrt{3}}{2}}$

$\frac{1}{2} + \frac{3}{2} + \frac{9}{2} = \frac{13}{2}$

$\frac{13}{2} = \frac{13}{2}$

$\frac{13}{2} = \frac{13}{2}$

$9) \quad \tan \theta$

$-\sin 30^\circ \cos 40^\circ + \cos 30^\circ \sin 40^\circ = \sin \theta$

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

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

$\sin \theta = \pm \frac{\sqrt{2}}{2}$

$\theta < 90^\circ$

$\sin \theta + \cos \theta = 1$

$\frac{1}{2} + \frac{1}{2} = 1$

$\tan \theta = \frac{\frac{\sqrt{2}}{2}}{\frac{\sqrt{2}}{2}} = 1$

$$\frac{r \tan 30^\circ (1 - \tan^2 30^\circ)}{(1 - \cot^2 40^\circ)^2} = \tan \theta$$

یا با سیدی
θ بر حسب رابح

$$\frac{r \times \frac{\sqrt{3}}{3} \times (1 - \frac{1}{3})}{(1 - (\frac{\sqrt{3}}{3})^2)^2} = \frac{\frac{4\sqrt{3}}{9}}{\frac{4}{9}} = \frac{4\sqrt{3}}{4} = \sqrt{3} = \tan \theta$$

$$\boxed{\frac{n}{r}} \text{ پس } 40^\circ = \theta$$

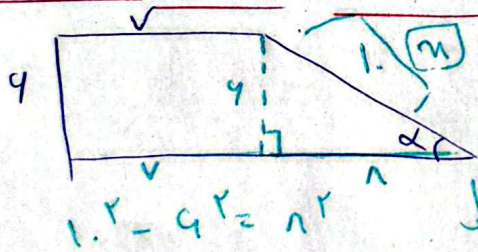
$$\frac{\sin \theta \cos \theta}{\sin \theta \cos \theta}$$

$$\tan \theta = 5 \quad (4)$$

$$\frac{15 \cos \theta - \cos \theta}{5 \cos \theta - \cos \theta} = \frac{14 \cos \theta}{4 \cos \theta} \quad (14)$$

$$\frac{\sin}{\cos} = \frac{5}{1}$$

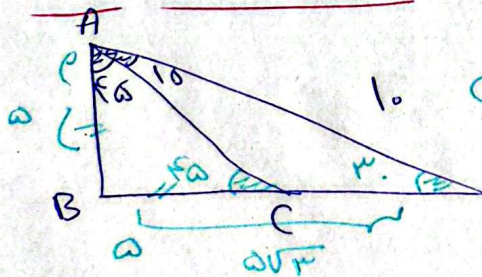
$$5 \cos = \sin$$



$$\sin \alpha = \frac{4}{n} = \frac{4}{1}$$

$$\sin \alpha = \frac{4}{1} \quad (5) \quad n=1$$

$$\text{محیط} = 1 + 4 + 1 + 4 + 1 = 11$$



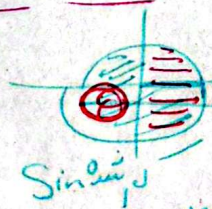
$$\hat{A} = 40^\circ$$

$$\sin 40^\circ = \frac{\sqrt{3}}{2}$$

$$\frac{\sqrt{3}}{2} \times 10 = 5\sqrt{3} = BD \quad (1)$$

$$DC = 5\sqrt{3} - 5 = 5(\sqrt{3} - 1)$$

$$\cos \theta \text{ افزایش } \theta \text{ (الف)}$$



نامعلوم

sin

cos

sin

بست 1-ی اور

افزایش θ و Sin θ و Cos θ هر دو با هم می یابند. به روز
هر دو بست - می روند



یا سا محمدی
 انتهای کمان α در ربع سوم باشد
 هر دو منفی
 $\sin \alpha$ یا $\cos \alpha$
 $\sin \alpha \cos \alpha$

$$\tan \alpha = \frac{1}{3}$$

$$\begin{aligned} 3 \sin \alpha &= \cos \alpha \\ (3 \sin \alpha)^2 + \sin^2 \alpha &= 1 \\ 10 \sin^2 \alpha &= 1 \\ \sin^2 \alpha &= \frac{1}{10} \\ \sin \alpha &= \pm \frac{1}{\sqrt{10}} \\ \frac{\sin \alpha}{\cos \alpha} &= \frac{1}{3} \\ &= \frac{\frac{1}{\sqrt{10}}}{\frac{3}{\sqrt{10}}} \end{aligned}$$

چون در ربع سوم پس $-\frac{\sqrt{10}}{10}$ درست است.