

$$\frac{2V^\circ}{110} = \frac{Rad}{\pi} \quad Rad = \frac{2V^\circ \pi}{110} = \frac{2\pi}{55}$$

$$\frac{125}{110} = \frac{Rad}{\pi} \quad Rad = \frac{125\pi}{110} = \frac{25\pi}{22}$$

$$\frac{5\pi}{12} = \frac{2}{110} \quad \frac{5\pi}{12} = \frac{2\pi}{110} = \frac{1}{55}$$

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$$10a + 22,5a + 12,5a = 110$$

$$45a = 110$$

$$a = \frac{110}{45}$$

$$\frac{a\pi}{1} = \frac{22,5a}{110}$$

$$\frac{125a}{9} = \frac{2}{110}$$

$$k = 12,5a$$

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

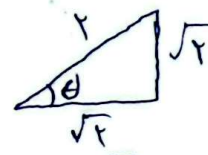
$$\frac{\frac{1}{3} + 1 + 3}{\sqrt{3} - \frac{1}{\sqrt{3}}} = \frac{\frac{4}{3}}{\frac{3\sqrt{3} - 1}{\sqrt{3}}} = \frac{4\sqrt{3}}{3\sqrt{3} - 1}$$

$$-\frac{1}{2} \times \frac{1}{2} + \frac{\sqrt{3}}{2} \times \frac{\sqrt{3}}{2} = \sin^2 \theta$$

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

$$\frac{2}{4} = \sin^2 \theta$$

$$\frac{1}{2} = \sin^2 \theta$$

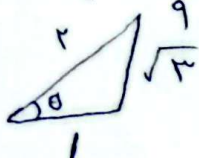


$$\tan \theta = \frac{1}{1} = 1$$

$$\frac{1\sqrt{3}}{3} \left(1 - \frac{3}{9}\right)$$

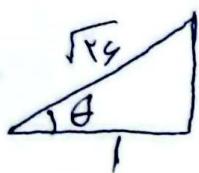
$$\frac{1\sqrt{3}}{3} \left(\frac{6}{9}\right)$$

$$\frac{1\sqrt{3}}{3} = \frac{1\sqrt{3}}{3} = \sqrt{3}$$



$$\theta = 60^\circ$$

$$\frac{60}{110} = \frac{Rad}{\pi} = \frac{60\pi}{110} = \frac{\pi}{11}$$



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

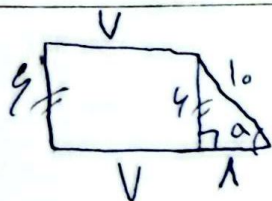
$$\cos \theta = \frac{1}{\sqrt{2}}$$

$$\sin = \frac{\text{مقابل}}{\text{مقدار}}$$

$$\cos = \frac{\text{مجاور}}{\text{مقدار}}$$

$$\frac{15}{\sqrt{24}} - \frac{1}{\sqrt{24}} = \frac{14}{\sqrt{24}} = \frac{14}{2\sqrt{6}} = \frac{7}{\sqrt{6}}$$

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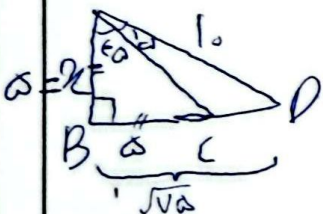


$$V + 10 + 1 + V + 9 = 38$$

$$\sin = \frac{4}{5}$$

$$4^2 + 1^2 = 10^2$$

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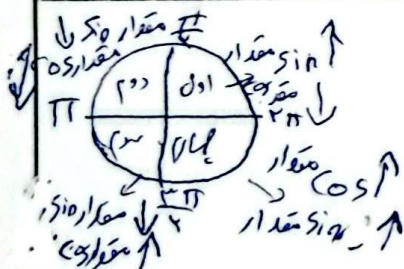


$$\cos \theta = \frac{1}{2} = \frac{R}{10}$$

$$\cos = \frac{\text{مجاور}}{\text{مقدار}}$$

$$R = \sqrt{10} - 1 = 10 - 1 = 9$$

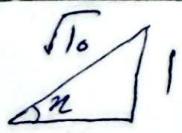
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الف) $\frac{3\pi}{2} > \theta > \pi$ یا تو به منهای $\sin$ و $\cos$ $\sin < 0$ و $\cos < 0$ $\sin > 0$ و $\cos < 0$ $\sin < 0$ و $\cos > 0$ $\sin > 0$ و $\cos > 0$

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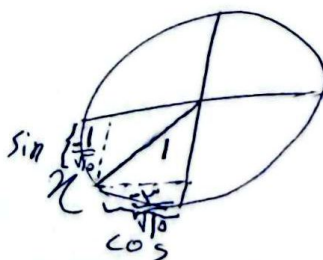
ب) $\pi > \theta > \frac{\pi}{2}$ یا تو به منهای $\sin$ و $\cos$ $\sin < 0$ و $\cos < 0$ $\sin > 0$ و $\cos < 0$ $\sin < 0$ و $\cos > 0$ $\sin > 0$ و $\cos > 0$



$$\sin \theta = \frac{1}{\sqrt{10}}$$

$$\sin = \frac{\text{مقابل}}{\text{مقدار}}$$

$$\cos = \frac{\text{مجاور}}{\text{مقدار}}$$



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

$$\cot = 3$$

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

$$\frac{1}{\sin^2 \theta} = 1 + \cot^2 \theta = 10$$

$$\sin^2 \theta = \frac{1}{10}$$

$$\sin \theta = \pm \frac{1}{\sqrt{10}}$$

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