

نقطہ سرسوی

۱۔ $\sin 150^\circ + \sin \left(\frac{120}{r} + 30^\circ \right) \left(\cos \left(\frac{120}{r} + 45^\circ \right) \cos 30^\circ + \sin \left(\frac{120}{r} + 45^\circ \right) \cos 60^\circ \right)$

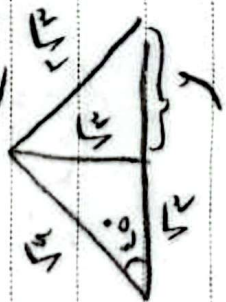
$$\left(\frac{\sqrt{2}}{2} - \cos(30^\circ) \right) \left(+ \sin(45^\circ) \right) - \cos(150^\circ)$$

$$\frac{r}{2} - \frac{r}{2} = \frac{1}{2}$$

ب) $\frac{1 + \sqrt{3} \left(\frac{1}{\sqrt{2}} \right)}{2} + \frac{r}{2} = \frac{1}{2} \cos 30^\circ + \cos \left(\frac{120}{r} + 30^\circ \right)$

$$\sin^2(30^\circ) + \cos^2(135^\circ)$$

$$\frac{r}{2} = \frac{r}{2} \quad \frac{r}{2} = \frac{r}{2}$$

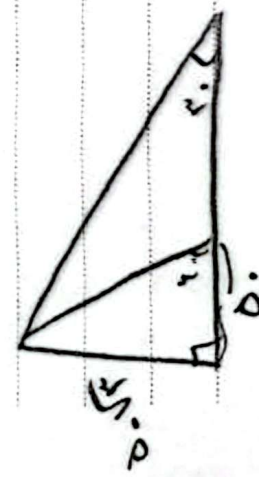


$$\frac{r}{2} = \frac{r}{2} \quad \frac{r}{2} = \frac{r}{2}$$

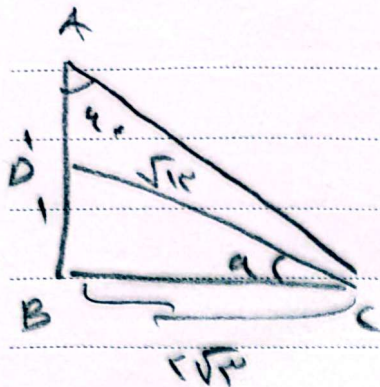
$$r = 12 - r = 9$$



$$\sin 45^\circ \frac{\sqrt{2}}{2} + \frac{r}{2} \quad \cos 45^\circ \frac{\sqrt{2}}{2} + \frac{r}{2}$$



$$\tan 45^\circ \cdot \frac{r}{2} = \frac{r}{2} \quad \tan 30^\circ \cdot \frac{1}{\sqrt{2}} + \frac{1}{\sqrt{2}} \quad (30^\circ + 30^\circ)$$



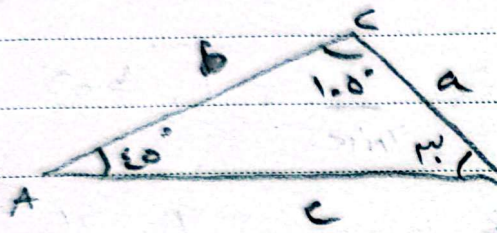
$$\cot 4 = \frac{1}{\sqrt{r}} = \frac{r}{x}$$

$$\tan \alpha = \frac{1}{r\sqrt{r}}$$

$$DC = 1 + r\sqrt{r} = \sqrt{r}$$

$$\sin \alpha = \frac{1}{\sqrt{r}}$$

$$\frac{1}{\sqrt{r}} \cot 4 + 1 = \frac{1}{\sin \alpha} \quad \text{Hence } \frac{1}{\sin \alpha}$$



$$\frac{c}{b} = ?$$

$$\frac{c}{\sin(1.0)} = \frac{b}{\sin(4)}$$

$$\frac{c}{b} = \frac{\sin(1.0)}{\sin(4)} = \frac{\sqrt{r}\sqrt{r}}{\frac{1}{r}}$$

$$\sin(1.0) = \sin(4 + \epsilon) = \sin 4 \cos \epsilon + \sin \epsilon \cos 4$$

$$\frac{\sqrt{r}}{r} = \frac{\sqrt{r}}{r} + \frac{\sqrt{r}}{r} \times \frac{1}{r} = \frac{\sqrt{r} + \sqrt{r}}{\epsilon}$$

$$\frac{x}{r} = \frac{r \times \epsilon \times \sin 4}{r} = \frac{\epsilon}{r}$$

$$1) \quad r \times \epsilon \times \sin(4) = 4\sqrt{r}$$

$$2) \quad \frac{1}{r} \times \epsilon \times r \times \sin\left(\frac{r}{r}\right) = r\sqrt{r}$$

$$\epsilon = r a + b$$

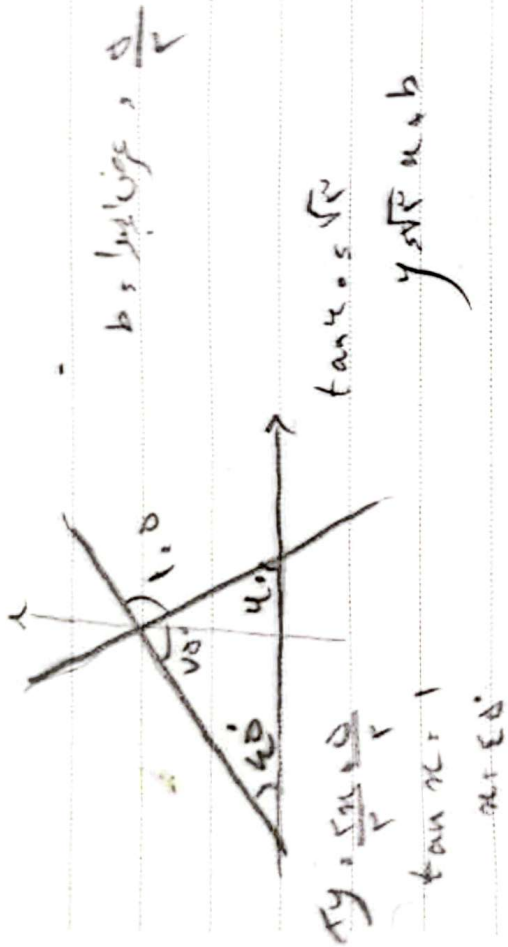
$$\frac{r \epsilon - a + b}{r \epsilon a}$$

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

$$\tan^2 \theta + 1 = \frac{1}{\cos^2 \theta}$$

$$a = \frac{1}{r}$$

$$\frac{1}{\epsilon} + 1 = \frac{b}{\epsilon} \quad \cos \frac{r}{\sqrt{b}}$$



$$m = \sqrt{r} \quad mb = \frac{\sqrt{r}}{r}$$

$$f(x) = -\cos(x) + \cos(x) + \cot(x)$$

$$f(x) = \cot x$$

$$f\left(\frac{\pi}{2}\right) = \cot\left(\frac{\pi}{2}\right) = -\sqrt{r}$$

$$+ \cos(x) + \sin(x)$$

$$= \frac{1}{\cos(x) + \sin(x)}$$

$$= \cos(x) + \sin(x)$$