

$$\tan \frac{11\pi}{8} + \sin \frac{15\pi}{8} \cos \frac{13\pi}{8}$$

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

$$\tan \frac{17\pi}{8} \sin \frac{11\pi}{8} + \cos \frac{13\pi}{8}$$

$$-\frac{\sqrt{2}}{2} \times \frac{-\sqrt{2}}{2} + \left(-\frac{1}{2}\right) = \frac{1}{2} - \frac{1}{2} = 0$$

$$\frac{3 \cos \alpha - \sin \alpha}{\cos \alpha + \sin \alpha} \div \sin \alpha$$

$$\frac{3 \cos \alpha - \sin \alpha}{\cos \alpha + \sin \alpha} \div \sin \alpha$$

$$\frac{3 \cot + 1}{\cot + 1} = \frac{3 \times 2 - 1}{2 + 1} = \left(\frac{5}{3}\right)$$

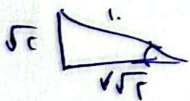
$$\sin \alpha = r \cos \alpha$$

$$\rightarrow r \cos^2 \alpha + \cos^2 \alpha = 1 \Rightarrow 4 \cos^2 \alpha = 1 \Rightarrow \cos^2 \alpha = \frac{1}{4}$$

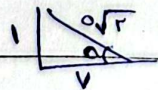
$$\cos \rightarrow \begin{matrix} +\frac{\sqrt{2}}{2} \\ -\frac{\sqrt{2}}{2} \end{matrix}$$

$$\cos \frac{11\pi}{8} \cdot \cos \alpha - \sin \frac{11\pi}{8} \cdot \sin \alpha = -\frac{\sqrt{2}}{2} \times \frac{\sqrt{2}}{2} - \frac{\sqrt{2}}{2} \times \frac{\sqrt{2}}{2}$$

$$\frac{2}{2} - \frac{2}{2} = \left(-\frac{2}{2}\right)$$



$$\sin \frac{13\pi}{8} \cdot \cos \alpha + \sin \alpha \cdot \cos \frac{13\pi}{8} \Rightarrow -\frac{\sqrt{2}}{2} \times \frac{\sqrt{2}}{2} + \frac{1}{2} \times \frac{-\sqrt{2}}{2}$$



$$-\frac{2}{2} - \frac{1}{2} = \left(-\frac{3}{2}\right)$$

$$r(1 - \cos^2 \alpha) + \cos^2 \alpha = r - r \cos^2 \alpha + \cos^2 \alpha = r - 1 \cos^2 \alpha = \frac{r}{2}$$

$$\cos^2 \alpha = \frac{r}{2} \Rightarrow 1 + \tan^2 \alpha = \frac{r}{2} \Rightarrow \tan^2 \alpha = \frac{1}{2} \Rightarrow \tan \alpha = \frac{1}{\sqrt{2}}$$

$$\frac{1}{r} \times \cancel{r} \times \sqrt{c} \times \sin \alpha = \frac{c}{r} \Rightarrow \sin \alpha = \frac{c}{r\sqrt{c}} = \frac{\sqrt{c}}{r} \Rightarrow \alpha = 60^\circ \text{ و } 120^\circ$$

$$\frac{120}{5} = 7$$

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$$\frac{1}{r} \times r \times c \times \sin 120^\circ = cf \Rightarrow \cancel{c} \times \cancel{c} = \cancel{c} r \Rightarrow c = r$$

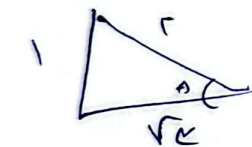
$$r = 12, c = 12 \Rightarrow \text{خط} = r + c = 24 = 9$$

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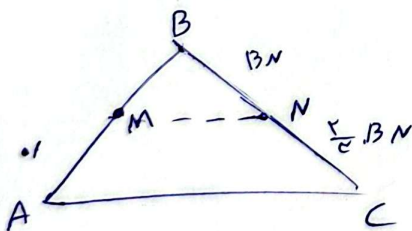
$$\frac{1}{r} \times \sin A \times \cancel{r} \times \omega - \frac{1}{r} \times \sin A \times \cancel{r} \times \cancel{c}$$

$$\hookrightarrow \frac{1}{r} \times \sin A (\cancel{r}) = 1/\omega \Rightarrow \sin A = \frac{1}{r}$$

$$\Rightarrow \tan A = \frac{1}{\sqrt{c}} = \frac{\sqrt{c}}{c}$$



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$$\frac{\frac{1}{r} \times \sin B \times \frac{\omega}{2} \times BN \times AB}{\frac{1}{r} \times \sin B \times BN \times BM} = \frac{c}{T}$$

$$\frac{\omega}{c} AB = c BM \Rightarrow$$

$$\omega AB = c^2 BM \Rightarrow AB = 1/18 BM$$

$$AM + BM = 1/18 BM \Rightarrow AM = 1/18 BM \Rightarrow \frac{BM}{AM} = \frac{1}{1/18} = 18$$

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$$\frac{1}{\sqrt{\cos^2 C}} - \frac{\sin}{\cos} = \frac{1 + \sin}{\cos} \Rightarrow \cos C =$$

$$\frac{|\sin|}{\cos} = - \frac{\sin}{\cos} \Rightarrow \sin C =$$

$$(1/2 \Rightarrow 6)$$

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