

حل المسألة

الف) $1 + \frac{\sqrt{3}}{2} \times \frac{\sqrt{3}}{4} = \frac{7}{4}$

ب) $\frac{\sqrt{3}}{4} \times \frac{\sqrt{3}}{4} + \frac{1}{4} = 1$

$\cos x = k \quad \sin x = k \Rightarrow \frac{1 \times k - k}{\delta k} = \frac{11}{8}$

$\sin^2 x = \cos^2 x \Rightarrow 1 = 2 \cos^2 x \quad \cos^2 x = \frac{1}{2} \Rightarrow \cos x = \frac{1}{\sqrt{2}}$

الف) $\cos(\frac{11}{8}\pi + \alpha) = \cos k \cos \alpha - \frac{\sqrt{3}}{2} \times \frac{\sqrt{3}}{4} - \frac{\sqrt{3}}{4} \times \frac{\sqrt{3}}{2} - \frac{1}{4} \times \frac{\sqrt{3}}{4} = -\frac{3}{4}$

ب) $\sin \epsilon \delta \times \cos \alpha + \sin \alpha \times \cos \epsilon \delta = \frac{\sqrt{3}}{4} \times \frac{\sqrt{3}}{\sqrt{80}} + \frac{1}{\sqrt{80}} \times \frac{\sqrt{3}}{4} = \frac{3}{4}$

$\sin^2 = \frac{1}{4} \Rightarrow \cos^2 = \frac{3}{4} \Rightarrow \tan^2 = \frac{1}{3} = \frac{1}{2}$

$\frac{1}{2} \times \sin x \times \sqrt{3} = \frac{1}{2} \Rightarrow \sin x = \frac{\sqrt{3}}{2} \rightarrow 60^\circ \quad \frac{130}{90} = 1.44$

$\delta \epsilon = \frac{1}{2} \times \frac{1}{2} \times a \times b \Rightarrow \frac{1}{4} \times a \times b = \frac{1}{4} \Rightarrow a = 12 \text{ و } b = 1 \Rightarrow r = \frac{1}{2}$

$\frac{1}{2} \sin A - 1 \sin A = 1/10 \rightarrow \frac{1}{2} \sin A = \frac{1}{10} \rightarrow \sin A = \frac{1}{5} \Rightarrow \tan A = \frac{1}{\sqrt{24}}$

$\frac{\frac{1}{2} \times \sin x \times (BM + MA) \times \frac{1}{2} \times AC}{\frac{1}{2} \times \sin x \times \frac{1}{2} \times AC} \Rightarrow BM + MA = \frac{1}{2} AC$

$|\sin x| = -\sin x \Rightarrow \sin$

حل المسألة (10)

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