۳)

$S(A\hat{E}B) = \frac{2\sin\beta \times 4}{2} = 4 \quad S(B\hat{C}D) = \frac{4\sin\beta \times 3}{2}$

$\frac{S(ABE)}{S(BCD)} = \frac{4\sin\beta}{9\sin\beta} = \frac{4}{9}$ ✓ ۲

۶)

$3^2 + 4^2 = 25$ $\quad \cos\alpha = \frac{4}{\sqrt{20}} = \frac{2\sqrt{5}}{5}$ ۱/۵

$pq = \sqrt{20}$ ؟ اصلا

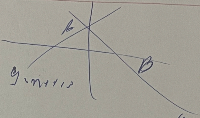
الف) $\frac{\sqrt{3}}{2} = 3 \times a = 60 \Rightarrow 45/2$ ✓ ۲

ب) $\frac{1}{2} \times 3 \times a = \frac{\sqrt{3}}{2}$ ✓ $2\sqrt{3}$

۸)

$180 - 150 = 30$ $\quad \tan 150 = \frac{-\sqrt{3}}{3}$ ۱/۲۵

$\sqrt{30} - 60 = 30$



$\frac{\sqrt{3}}{2} = BH = \frac{3}{2}$

$BA = 3\sqrt{3}$

$m = \tan 120 = -\sqrt{3}$ $\quad mb = \frac{-3\sqrt{3}}{2}$

$m = \sqrt{3}$

$BO = \frac{3\sqrt{3}}{2} \Rightarrow b = \frac{3\sqrt{3}}{2}$

$mb = \sqrt{3} \times \frac{3\sqrt{3}}{2} = \frac{9}{2}$ $\quad (\frac{9}{2})$

۹)

$f(\frac{5\pi}{6}) = \cos(\pi + \frac{5\pi}{6}) + \sin(\frac{\pi}{2} - \frac{5\pi}{6}) - \tan(\frac{3\pi}{2} + \frac{5\pi}{6})$ ۲

$\Rightarrow \cos\frac{5\pi}{6} + \cos\frac{5\pi}{6}(-\cot\frac{5\pi}{6}) = \cot\frac{5\pi}{6}$

$\Rightarrow \cot\frac{5\pi}{6} = \frac{-\frac{\sqrt{3}}{2}}{\frac{1}{2}} = -\sqrt{3}$ ✓

۱۰) ۱

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