نام و نام خانوادگی .... پاسخنامه تشریحی تکلیف شماره ۱۴..... کلاس ۱۲ ....

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$\tan O_1 = \frac{TB}{OT}$

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$\frac{\sin 45}{BD} = \frac{\sin \hat{B}}{}$

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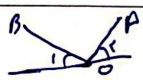

$x_A = \sin\theta_2 = \frac{1}{2} \Rightarrow \theta_2 = 30^\circ$

$y_B = \cos O_1 = \frac{1}{2} \Rightarrow O_1 = 60^\circ$

$\Rightarrow S = S_{A\hat{O}B} + S_{A\hat{O}C} + S_{OBC} = \frac{1}{2}\times1\times1\times\sin(180-90-30) + \frac{1}{2}\times1\times1\times\sin(90+30) + \frac{1}{2}\times1\times1\times\sin(90+O_1) = \frac{\sqrt{3}}{4} + \frac{\sqrt{3}}{4} + \frac{1}{4}$

$\boxed{\frac{3+\sqrt{3}}{4}}$

$A:(\frac{1}{2}, \frac{\sqrt{3}}{2})$ $B(-\frac{\sqrt{3}}{2}, \frac{1}{2})$ $C=(0,-1)$

$L_{AB} = \sqrt{\frac{(1+\sqrt{3})^2 + (1-\sqrt{3})^2}{4}} \Rightarrow L_{AB} = \sqrt{2}$

$L_{AC} = \sqrt{(\frac{1}{2})^2 + (\frac{\sqrt{3}+2}{2})^2} = \sqrt{\frac{1+3+4+4\sqrt{3}}{4}} = \sqrt{2+\sqrt{3}}$

$L_{BC} = \sqrt{\frac{3}{4} + \frac{9}{4}} = \sqrt{3}$

$\Rightarrow 2p = \sqrt{2} + \sqrt{2+\sqrt{3}} + \sqrt{3}$

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$S_{A\hat{B}C} = \frac{1}{2} AC \times AB \times \sin A = \frac{1}{2} \times \log_2 27 \times \log_3 16 \times \frac{1}{2} = \frac{1}{2} \times \frac{3}{2} \times 4 \times \frac{1}{2} = \boxed{3}$

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$2\cos^4\alpha - \cos^2\alpha - (\sin^2\alpha \cos 2\alpha) \Rightarrow 2\cos^4\alpha - \cos^2\alpha - \sin^2\alpha(\cos^2\alpha - \sin^2\alpha)$

$= 2\cos^4\alpha - \cos^2\alpha - \frac{1}{4}\sin^2 2\alpha + \sin^4\alpha$

الف) $-\sin 2\alpha + 2 \Rightarrow T = \frac{2\pi}{|b|} = \frac{2\pi}{2} = \pi$

ب) $2\cos\left(\pi\alpha + \frac{\pi}{2}\right) + 1 = -2\sin(\pi\alpha) + 1 \quad T = \frac{2\pi}{|b|} = \frac{2\pi}{|\pi|} = 2$

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