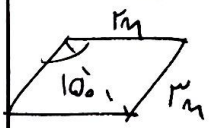
نام و نام خانوادگی ..... پاسخنامه تشریحی تکلیف شماره ..... کلاس .....A.....



مثلث $S = \frac{ab}{2}\sin C = \frac{1}{2}\sin 150 \times 3 \times 3 = \frac{9}{4}$

$\frac{9}{4}R^2 = 27 \Rightarrow R = \sqrt{12}$

محیط $P = 2(3\sqrt{12} + 3\sqrt{12}) = 12\sqrt{12}$ ۱

$S_{ABC} - S_{ADE} = \frac{1}{2}\sin A(5\times 7 - 3\times 7) = 1,75$

$\frac{7}{2}\sin A = 1,75 \Rightarrow \sin A = \frac{1}{2} \Rightarrow A = 30 \rightarrow \tan A = \frac{\sqrt{3}}{3}$ ۲

$\frac{|\sin\alpha|}{\cos\alpha} = \frac{-1}{\cot\alpha} = -\tan\alpha = \frac{-\sin\alpha}{\cos\alpha} \rightarrow |\sin\alpha| = -\sin\alpha$

$\sin\alpha < 0$

$\frac{1}{|\cos\alpha|} = \frac{\sin\alpha}{\cos\alpha} = \frac{1+\sin\alpha}{|\cos\alpha|} \rightarrow -\frac{\sin\alpha}{\cos\alpha} = \frac{\sin\alpha}{|\cos\alpha|} \rightarrow |\cos\alpha| = -\cos\alpha$

$\cos\alpha < 0$

این سوم ۳

$\tan(\pi-\alpha) = -\tan\alpha = \frac{1,5}{2} \rightarrow \tan\alpha = -\frac{3}{4}$

$\tan(\frac{\pi}{2}-\alpha) = \cot\alpha = \frac{1}{\tan\alpha} = -\frac{4}{3}$ ۴

$3\cos(241) = 3\cos(270-29)$

$2\sin(158) = 2\sin(180-22)$ $\rightarrow$ $\frac{-5\sin 22}{-2\sin 22} = \frac{5}{2} = 2,5$

$\sin(208) = \sin(180+28)$

$\cos(192) = \cos(270+22)$ ۵

$\sin\left(\frac{17}{2}+\alpha\right) = \cos\alpha$

$-\sin(\alpha-\pi) = +\sin\alpha$

$\tan^2+1 = \frac{1}{\cos^2} \Rightarrow \tan^2 = \frac{5}{4}$

$\sin^2+\cos^2=1 \Rightarrow \sin^2 = 1-\frac{4}{9} = \frac{5}{9}$

$$\frac{\cos\alpha+\sin\alpha}{\frac{5}{4}-1} = \frac{\frac{5}{9}+\frac{4}{9}}{\frac{1}{4}}$$

$$\frac{\frac{11}{9}}{\frac{1}{4}} = \frac{44}{9}$$

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$1+\tan^2 = \frac{1}{\cos^2}$ $\quad \tan = \frac{\sin}{\cos} = 2 \Rightarrow \cos^2 = \frac{1}{5}$

$\Rightarrow \cos = \frac{\sqrt{5}}{5}$ ربع سوم $\rightarrow \cos = -\frac{\sqrt{5}}{5}$

۲

$\tan 90^\circ = \sqrt{3}$

$-\frac{2m}{m^2-1} = \sqrt{3}$ $\quad \sqrt{3}m^2+2m-\sqrt{3}=0 \xrightarrow{\div\sqrt{3}} m^2+2m-3=0$ $\quad \frac{1}{\sqrt{3}}, -\frac{3}{\sqrt{3}}$

$\frac{1}{\sqrt{3}} - \left(-\frac{3}{\sqrt{3}}\right) = \frac{4}{\sqrt{3}}$

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$\tan\left(\frac{\pi}{2}-x\right) > 0$ (تانژانت)

$0 < \frac{\pi}{2}-x < 90^\circ$

$\frac{1-m}{2+m} > 0$

	-2		1	
	$-$	$+$	$+$	$-$
	ق		0	

$m \in (-2, 1]$

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$\tan(200) = \tan(270+30) \rightarrow -\cot(30)$

$\cos(210) = \cos(180+30) \rightarrow -\cos(30)$

$\tan(240) = \tan(90+30) \rightarrow -\cot(30)$

$\sin(480) = \sin(90+30) \rightarrow \cos(30)$

$\frac{3}{2} - \frac{3}{2} = 0$

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