نام و نام خانوادگی: سیدرضا التماسیان   شماره تکلیف: ۲۶   کلاس: یازدهم بیر B

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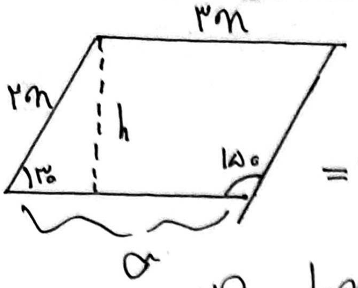

$S_{\text{متوازی‌الاضلاع}} = a \times h \Rightarrow h = 2x \times \sin 30 = x$ ($\sin 30 = \frac{1}{2}$)

$\Rightarrow S = 3x \times x = 54 \Rightarrow x^2 = 18 \Rightarrow x = 3\sqrt{2}$

$P = 10x \Rightarrow 10 \times 3\sqrt{2} = 30\sqrt{2}$

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$S_{ABC} = \frac{5 \times 7 \times \sin A}{2}$?

$S_{ADE} = \frac{4 \times 7 \times \sin A}{2}$

$\Rightarrow 1.75 = (17.5 - 14)\sin A \Rightarrow$

$\sin A = \frac{1}{2} \Rightarrow A = 30 \rightarrow$ حاده است

$\tan 30 = \frac{\sqrt{3}}{3}$

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$\frac{|\sin\alpha|}{\cos\alpha} = -\frac{1}{\frac{\cos\alpha}{\sin\alpha}} \Rightarrow |\sin\alpha| = -\sin\alpha \Rightarrow \sin\alpha < 0$

ناحیه سوم

$\frac{1}{|\cos\alpha|} - \frac{\sin\alpha}{\cos\alpha} = \frac{1+\sin\alpha}{|\cos\alpha|} \Rightarrow -\frac{\sin\alpha}{\cos\alpha} = \frac{\sin\alpha}{|\cos\alpha|} \Rightarrow \cos\alpha < 0$

در ناحیه سوم هم سینوس هم کسینوس منفی هستند.

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$\tan\alpha =$ شیب خط $\Rightarrow a = \frac{\Delta y}{\Delta x} = \frac{1.5}{-2} = -\frac{3}{4}$

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

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$\frac{3\cos(\frac{3\pi}{2} - 22°) - 2\sin(\pi - 22°)}{\sin(\pi + 22°) - \cos(\frac{3\pi}{2} + 22°)} = \frac{-3\sin 22 - 2\sin 22}{-\sin 22 - \sin 22} = \frac{-5\sin 22°}{-2\sin 22°}$

$= 2.5$

$$\frac{\sin(\frac{\pi}{2}+\alpha)-\sin(\alpha-\frac{\pi}{2})}{|\tan^2\alpha-1|} \Rightarrow \frac{\cos\alpha+\sin\alpha}{|\tan\alpha-1|} \Rightarrow \frac{\frac{2}{3}+\frac{\sqrt{5}}{3}}{\frac{1}{6}} = \frac{6(2+\sqrt{5})}{3}$$

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$$\cos\alpha=\frac{2}{3} \Rightarrow 1+\tan^2\alpha=\frac{1}{\cos^2\alpha} \Rightarrow 1+\tan^2\alpha=\frac{9}{4} \Rightarrow \tan\alpha=\frac{\sqrt{5}}{2} \Rightarrow \sin\alpha=\frac{\sqrt{5}}{3}$$

$$\sin\alpha=2\cos\alpha \Rightarrow \sin^2\alpha+\cos^2\alpha=1 \Rightarrow 4\cos^2\alpha+\cos^2\alpha=1$$

$$\Rightarrow \cos\alpha=\frac{1}{\sqrt{5}} \rightarrow \text{ربع سوم} \Rightarrow -\frac{1}{\sqrt{5}}$$

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$$(m^2-1)y=-2mx+2 \Rightarrow \alpha=\frac{-2m}{m^2-1}=\tan 60$$

$$\Rightarrow \sqrt{3}m^2+2m-\sqrt{3}=0 \Rightarrow |m_2-m_1|=\frac{\sqrt{\Delta}}{|a|} \Rightarrow \frac{\sqrt{4-4\times-\sqrt{3}\times\sqrt{3}}}{\sqrt{3}}$$

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$$\frac{4}{\sqrt{3}}=\frac{4\sqrt{3}}{3}$$

$$-\frac{\pi}{4}<\alpha<\frac{\pi}{4} \Rightarrow \frac{\pi}{6}>-\alpha>-\frac{\pi}{4} \Rightarrow \frac{\pi}{2}>-\alpha+\frac{\pi}{6}>0$$

$$0<\alpha<\frac{\pi}{2} \Rightarrow \tan\alpha>0 \Rightarrow \frac{1-m}{2+m}>0$$

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$$m\in(-2,1)$$

$$\tan(300^\circ)=-\sqrt{3}$$

$$\cos(210^\circ)=-\frac{\sqrt{3}}{2} \Rightarrow \frac{-\sqrt{3}}{2}\times-\sqrt{2}=\frac{\sqrt{3}}{2}$$

$$\tan(480^\circ)=\tan(120^\circ)=-\sqrt{3} \Rightarrow \frac{3}{2}-\frac{\sqrt{3}}{2}=0$$

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$$\sin(840^\circ)=\sin(120^\circ)=\frac{\sqrt{3}}{2} \Rightarrow -\sqrt{3}\times\frac{\sqrt{3}}{2}=-\frac{3}{2}$$