

soln: $\frac{1}{2} \times \sqrt{2} \times R \sin \alpha = \epsilon, \delta$

$\sqrt{2} \times \sin \alpha = \epsilon, \delta$

$\sin \alpha = \frac{\epsilon, \delta}{\sqrt{2}} = \frac{\sqrt{2}}{2} \rightarrow \alpha = 45^\circ, 135^\circ$

$\frac{1 \times \sqrt{2}}{2} = \boxed{\sqrt{2}}$

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$\frac{1}{2} \times \sqrt{2} \times \sqrt{2} \times \sin 135^\circ = \sqrt{2}$



$\sqrt{2} \times \sqrt{2} = \sqrt{2} \times \sqrt{2}$

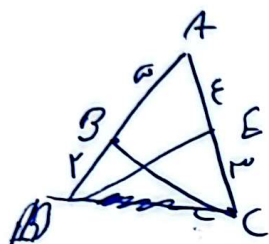
$n = 11 \rightarrow n = \sqrt{11}$

$n = + \sqrt{2}$

$\sqrt{2} \times \sqrt{2} + \sqrt{2} \times \sqrt{2} = \boxed{\sqrt{2} \times \sqrt{2}}$

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$\sin \alpha = \frac{\epsilon, \delta}{\sqrt{2}} \rightarrow \sin \alpha = \sqrt{2}$



$S_{ADE} = \frac{1}{2} \times d \times u \times \sin \hat{A} = 10, 2 \sin \hat{A}$

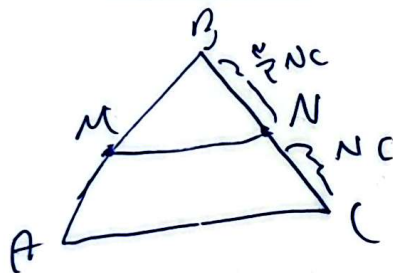
$S_{ABC} = \frac{1}{2} \times \epsilon \times v \times \sin \hat{A} = 1 \epsilon \sin \hat{A}$

$\sin \hat{A} = \frac{1}{2} = \frac{1}{2}$

$\hat{A} = 30^\circ$

$S_{ADE} - S_{ABC} = 10, 2 - 1 \epsilon \sin \hat{A} = 10, 2 \sin \hat{A} = 10, 2$

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$BN = NC \rightarrow BN = \frac{1}{2} NC$

$\frac{1}{2} NC + NC = \frac{3}{2} NC = BC$

$S_{ABC} = \frac{1}{2} \times \frac{1}{2} NC \times AB \times \sin \hat{B} = \frac{1}{4} NC \times AB \times \sin \hat{B}$

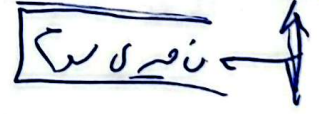
$\frac{1}{2} NC \times \frac{1}{2} AB + \frac{1}{2} AM = \frac{1}{2} AB \rightarrow \frac{1}{2} AM = \frac{1}{2} AB - \frac{1}{4} NC$

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

$\tan \alpha = \frac{\sin \alpha}{\cos \alpha} \rightarrow \cos \alpha = \cos \alpha$

$\cos \alpha < 0$



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