

نام و نام خانوادگی: ..... با استفاده از تریگونی کلید شماره ۲۷ کلاس: ..... ۲۷

$\frac{1}{\sqrt{2}} \sin a \times \sqrt{2} \times 2 = \frac{9}{\sqrt{2}} \quad \sin a = \frac{\sqrt{2}}{\sqrt{2}} \Rightarrow a = 135, 45$   
 $\frac{135}{45} = 3$

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$a = \theta - \beta, \quad \tan \theta = 2 \quad \tan \beta = 1$   
 $\tan(\theta - \beta) = \frac{2-1}{1+2} = \frac{1}{3} = \tan a \quad \cot a = 3$

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$\tan a = \frac{n}{2} \quad \tan 2a = \frac{2}{n} = \frac{2 \times \frac{n}{2}}{1 - \frac{n^2}{4}} = \frac{\frac{2n}{2}}{\frac{4-n^2}{4}} = \frac{2n}{4-n^2}$   
 $\frac{2}{n} = \frac{2n}{4-n^2} \Rightarrow n = 1.6 \Rightarrow \tan a = \frac{2}{2 \times 1.6} = \frac{1}{1.6}$   
 $\Rightarrow \cot a = 1.6$

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$\tan a = -\tan \theta \Rightarrow AH = \sqrt{14-9} = \sqrt{5}$   
 $\tan \theta = \frac{\sqrt{5}}{2} \Rightarrow \tan a = -\frac{\sqrt{5}}{2}$

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$1 + \sin^2 m = \frac{4}{3} \Rightarrow \sin^2 m = \frac{1}{3} \Rightarrow 1 - \cos^2 m = \frac{1}{3} \quad \cos^2 m = \frac{2}{3}$   
 $\tan^2 m = \frac{\frac{1}{3}}{\frac{2}{3}} = \frac{1}{2}$

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