

MATH. 125, QUIZ 5 - Section 4.3 & 4.4 (25points = 5% final grade) - *Fall 2009*

Show your work - no credit for just writing down the final answer! You are **NOT** allowed to use the calculator for the problems 1-4. You are allowed to use a calculator for the last problem but you still have to show your work step by step (like in the book) not just write the final answer.

1. (3 points each) In a right triangle, $\sin \theta = \frac{3}{4}$ sketch the triangle and evaluate $\cos \theta$ and $\tan \theta$. Show your work. Do not use a calculator.

(a) $\cos \theta =$

(b) $\tan \theta =$

2. (3 points each) In a right triangle, $\tan \theta = 4$. Sketch the triangle and evaluate $\sin \theta$ and $\csc \theta$. Show your work. Do not use a calculator.

(a) $\sin \theta =$

(b) $\csc \theta =$

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3. (5 points) Find **two** values of θ such that $\cos \theta = 0.5$, write your answer in degrees.
4. (5 points) $\sin \theta = -\frac{2}{5}$, θ is located in the third quadrant. Based on the information provided find the exact value of $\cos \theta$.
5. (5 points) A plane rises from take-off and flies at an angle of 9° . When it has gained 750 feet, find the distance to the nearest foot, the plane has flown.