Due Tueaday 2/21/2017

On a separate piece of paper, complete a-e for each of the following. Show all work. Avoid intermediate rounding error. Box your final answers, with units when appropriate.

1. If $\sec\theta = -5$ and $\csc\theta < 0$

2. If $\cot\theta = -\frac{3}{4}$ and $\sec\theta < 0$

3. If $\csc\theta = -3$ and $\sec\theta < 0$

4. If $\cos\theta = \frac{2}{7}$ and $\csc\theta < 0$

(a) Draw the reference triangle for θ in the correct quadrant. Show your arc and angle θ.

(b) Find the **simplified, exact, rationalized** value of $\sin\theta$.

(c) Find the **simplified, exact, rationalized** value of $\tan\theta$.

(d) Find the reference angle, θ_{ref}, for θ in degrees. **Show the equation you are solving** and report 3 decimals.

(e) To three decimals, find the value of θ such that $\theta \in \left[0^o, 360^o\right)$. Show the computations that lead to your answer.