## Two Clues Kwiz!

## Due Wednesday 1/31/2018

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  $\theta$  in the correct quadrant. Show your arc and angle  $\theta$ .
- (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,  $\theta_{ref}$ , for  $\theta$  in degrees. Show the equation you are solving and report 3 decimals.
- (e) To three decimals, find the value of  $\theta$  such that  $\theta \in [0^{\circ}, 360^{\circ})$ . Show the computations that lead to your answer.