

August 5, 2003

*Show all work for credit.* Leave all answers as exact answers unless otherwise stated. Keep at least three digits on all calculations.

1. Given that  $\sin \theta = .15$ , find  $\sec \theta$ . You *must* show work for credit.
2. Give a co-terminal angle of  $17\pi/20$ .
3. Give the reference angle to  $15\pi/18$ . Hint, the reference angle will be between 0 and  $\pi/2$ .
4. Find the *exact* value of  $\sin(-\pi/3)$ .
5. (Bonus) Show, using identities we learned yesterday, that  $\tan^2 \theta + 1 = \sec^2 \theta$ .