Math 1160K - Fall 2014 Group Name:_____
§8.6 Worksheet

Name: _____

Organize yourselves into groups of 5. If you are not in a group, you will be assigned to one. Work your assigned problem for the allotted amount of time. Then, get into groups with all people assigned your same problem. Discuss the problem until you have all agreed on an answer. Return to your original group and *fully and clearly* explain how to do your problem.

1. $\cos(2\theta) + 5\cos\theta + 3 = 0$

2. $\sin(2\theta)\sin(4\theta) = 0$

3. $\cos\left(\frac{1}{2}\sin^{-1}\frac{3}{5}\right)$

4. Given that $\cos\theta = -\frac{\sqrt{6}}{3}$, $\frac{\pi}{2} < \theta < \pi$, find

   (a) $\sin\frac{\theta}{2}$

   (b) $\sin 2\theta$

5. Given that $\cos\theta = -\frac{\sqrt{6}}{3}$, $\frac{\pi}{2} < \theta < \pi$, find

   (a) $\cos\frac{\theta}{2}$

   (b) $\cos 2\theta$