**Problem Set Solution 7 and 8**

1. The answer for the following
    a. Many solutions are available ($\sqrt{2}$,$\frac{3\pi}{4}$, $\sqrt{2}$), (-$\sqrt{2}$,$\frac{7\pi}{4}$, $\sqrt{2}$)
    b. (-2$\sqrt{3}$,2,3)
2. $\rho = 2, \theta = \frac{3\pi}{4}\ \phi = \frac{\pi}{4}$
3. The answer for the following
    a. $\rho = 4, \theta = \frac{\pi}{4}\ , \phi = \frac{\pi}{2}$
    b. $r = 10, \theta = \frac{\pi}{6},\ z = 0$
4. Plot (refer to class notes)
5. Plot (refer to class notes)
6. ($\sqrt{2}$, $\sqrt{2}$) and ($\frac{3}{2}$, $\frac{-3\sqrt{3}}{2}$) respectively
7. Graph (refer to class notes)
8. Graph (refer to class notes)
9. (-2,0)
10. (4,$\frac{3\pi}{2}$) or (-4,$\frac{\pi}{2}$)
11. $0 \leq \theta < \pi$
12. Rose
13. $r = \frac{2}{\sin\theta - 3\cos\theta}$
14. $r = \sqrt{3}$
15. $x^2 + y^2 = 2y$