## Dartmouth College

Mathematics 13 - Sept. 18

1. Graph the point with polar coordinates $\left(4, \frac{5 \pi}{6}\right)$. Then convert to rectangular coordinates.
2. Convert to polar coordinates: $y=2 x$.
3. Sketch the region described by the conditions $2 \sec (\theta)<r<4,-\frac{\pi}{3}<\theta<\frac{\pi}{3}$. Also find inequalities in rectangular coordinates to describe this region.
