

Math 181
Fall 2009

Name _____

Homework #3

Due _____

No late papers accepted! No excuses!

1. Find the center of mass of a thin plate covering the region between the curve $y = 3x^{-\frac{3}{2}}$ and the x-axis from $x = 1$ to $x = 9$ if the density is $\rho(x) = x$.

2. Find the area of the surface generated by revolving $x = \sqrt{y}$, $2 \leq y \leq 6$ about the y-axis.