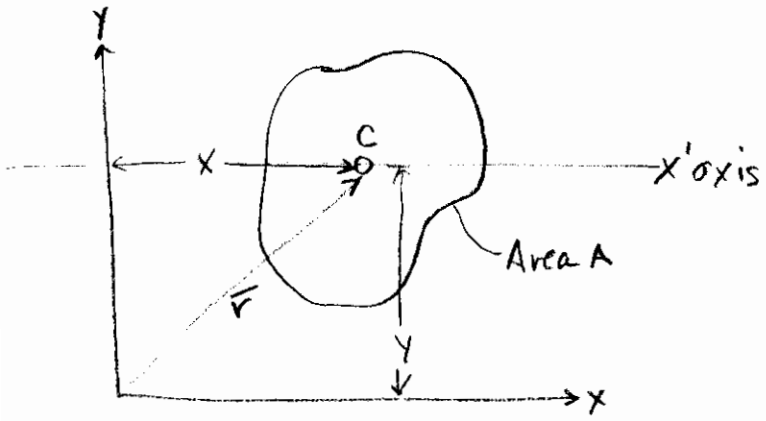
Lecture 3 Muddy Point 9/9/04



1st Moment of Inertia

$$= \int_A r \, dA$$

$$= \bar{r} \, dA$$

2nd Moment of Inertia about x-axis

$$I_x = \int_A y^2 dA$$

Parallel axis theorem: pick a new x-axis, X', through the centroid C. Then:

$$I_x = \bar{I}_{x'} + Ay^2$$