

QUIZ 6

Time: 10min

1. A rod of length 3 with density $\delta(x) = 1 + x^2$ is positioned along the positive x-axis, with its left end at the origin. Find the center of mass of the rod.
2. Suppose a chain of length 10 meters and total mass of 10 Kilograms is dangling from the top of a building. How much work is required to pull up the chain (assume that $g = 10M/sec^2$).

Each problem is worth 5 pts.