

**Practice Quiz 10 (L30-L32)**

1. If a force of 15N stretches a spring 2m past its natural length, how much work does it take to stretch it 5m past its natural length?
2. Find the center of mass of the region bounded by the parabola  $y = x^2 - x$  and the line  $y = x$ .
3. Solve the initial value problem:  $\frac{dy}{dt} = ky$  and  $y_0 = 5$ .