

CVEN 221 Honors – Homework #9

- 1) The manufacturer of a spool for hoses wants to determine the moment of the force \mathbf{F} about the axis $A-A'$. The magnitude of the force, in Newtons, is defined by the relationship $F = 300(1-x/L)$, where x is the length of the hose wound on the 0.6-m-diameter drum and L is the total length of the hose. Write a computer program that can be used to calculate the required moment for a hose 30 m long and 50 mm in diameter. Beginning with $x = 0$, compute the moment after every revolution of the drum until the hose is wound on the drum.

