

CVEN 305 Honors - Homework #14 Supplemental Problems

1. **Problems 1 to 3, and 7,** Write a computer program that can be used to calculate the critical buckling load, P_{cr} , for round and rectangular cross-sections for a given modulus of elasticity, E , length, L , and cross-sectional dimensions. For a given applied load, P , calculate the factor of safety, **F.S.**, of P_{cr} to P . You should write the program in such a way that the buckling due to the type of end conditions (i.e. pinned, fixed, etc.) can be accounted for.