

HW 6: Due Thursday March 19

1. SG 11.19
2. SG 11.20
3. SG 11.22
4. Consider a pin-pin beam of length L with transverse loads in the positive and negative directions at $x = L/4$ and $x = 3L/4$, respectively. By approximately minimizing the potential energy of the system find the displacement field for the beam. Compare your approximation to the exact answer.
5. Carefully derive the matrix equations that would result from using the method of Ritz on an elastic tension-compression bar problem in the presence of both point forces and distributed loads.