

# Chapter 7, Section 4: Cables



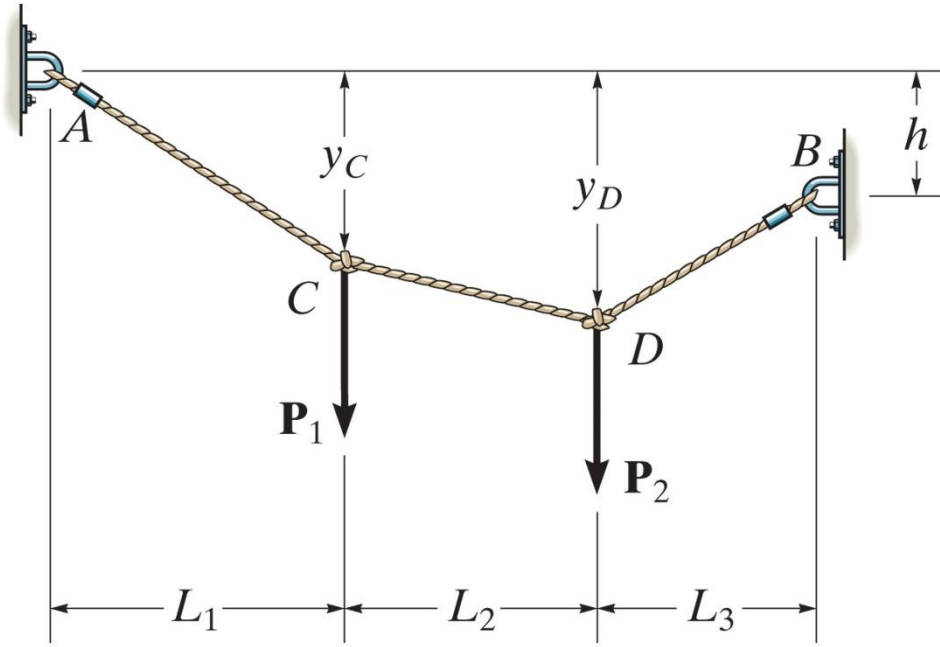
# Cables

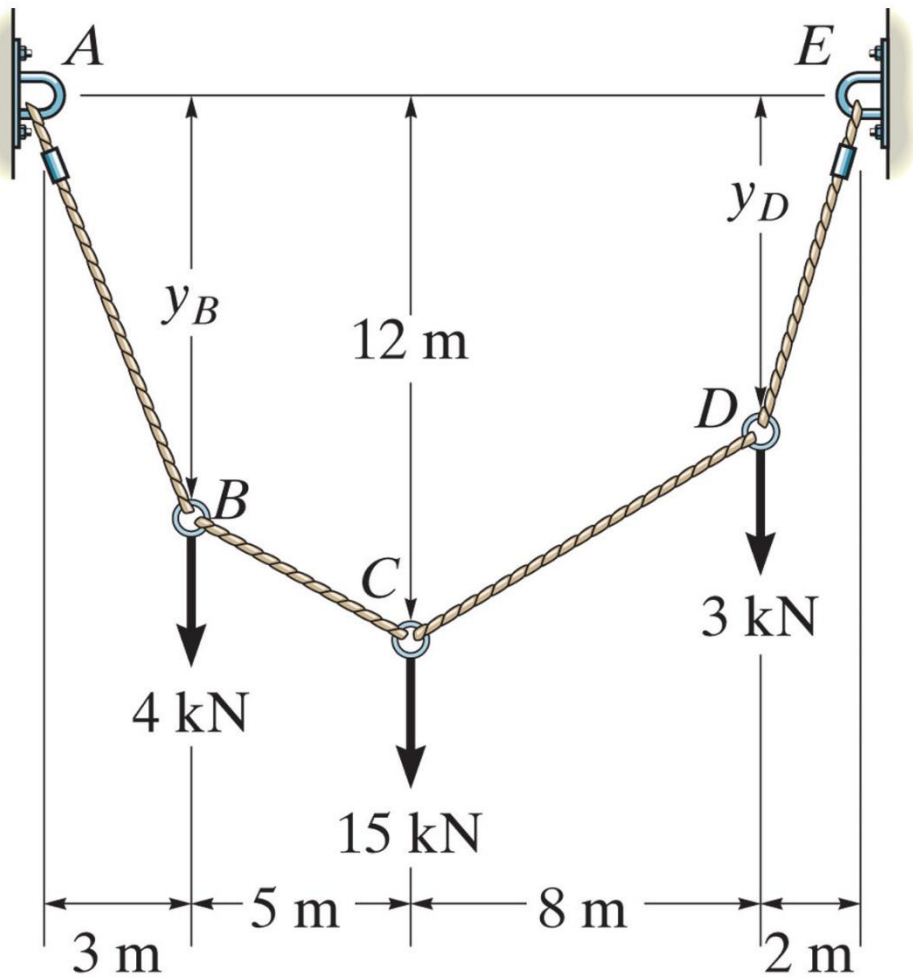


Assume:

- Weight is negligible
- Perfectly flexible
- Inextensible

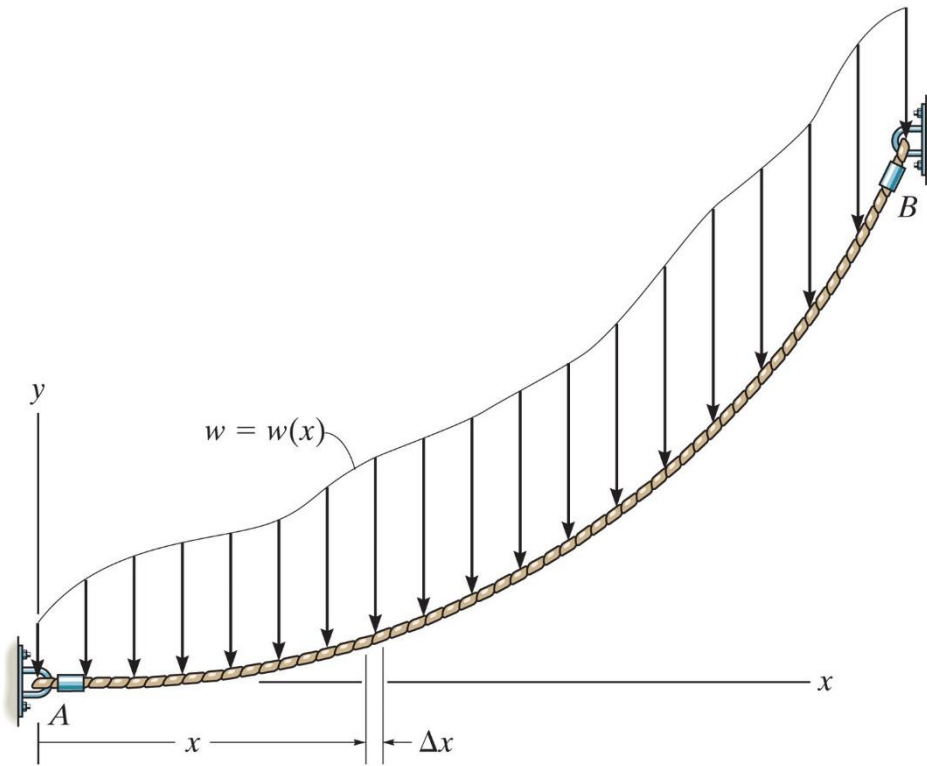
# Cable subjected to concentrated loads

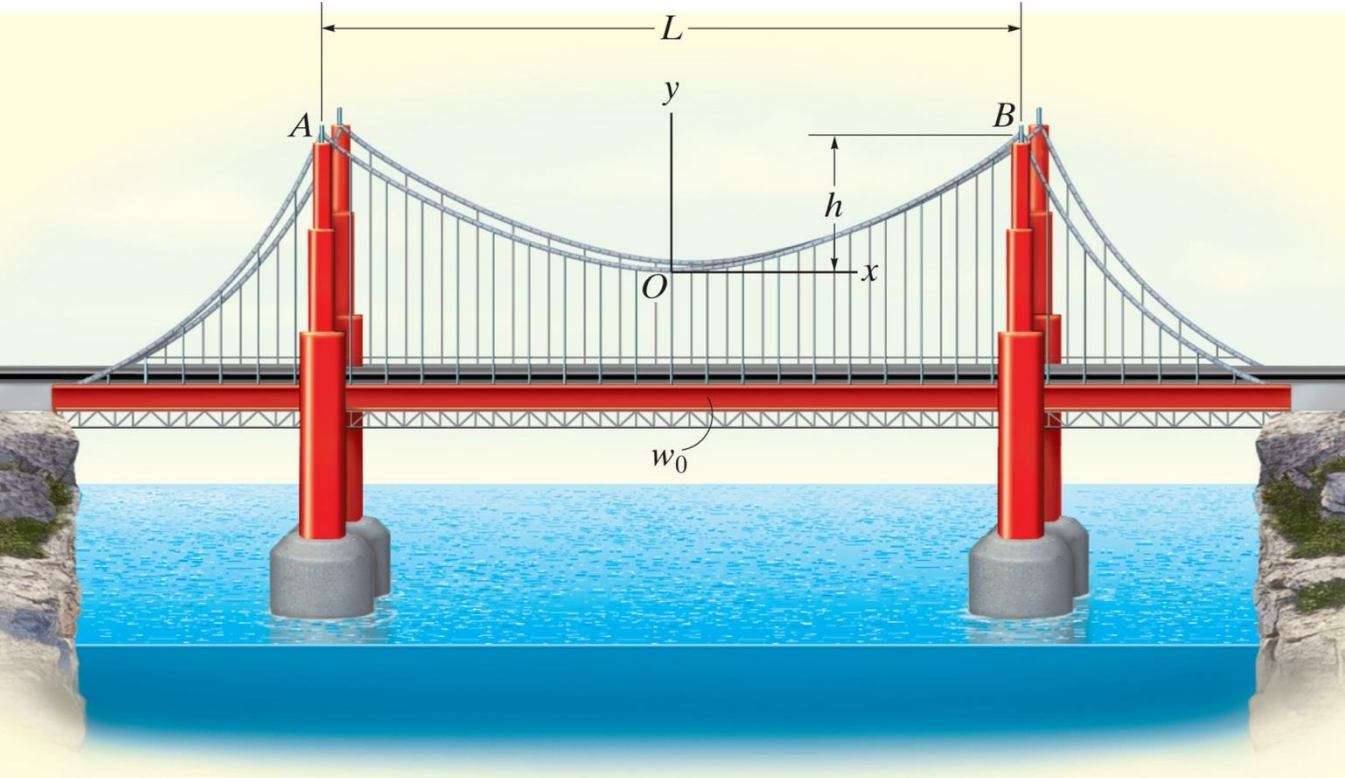




Determine the tension in each segment of the cable shown.

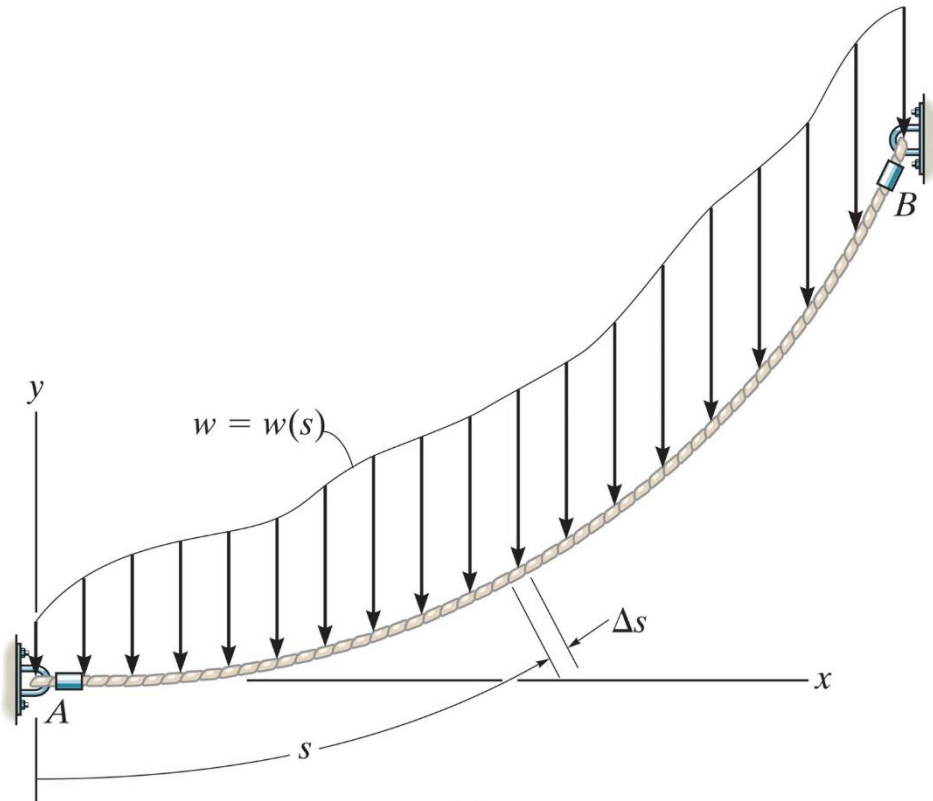
# Cable subjected to a distributed load

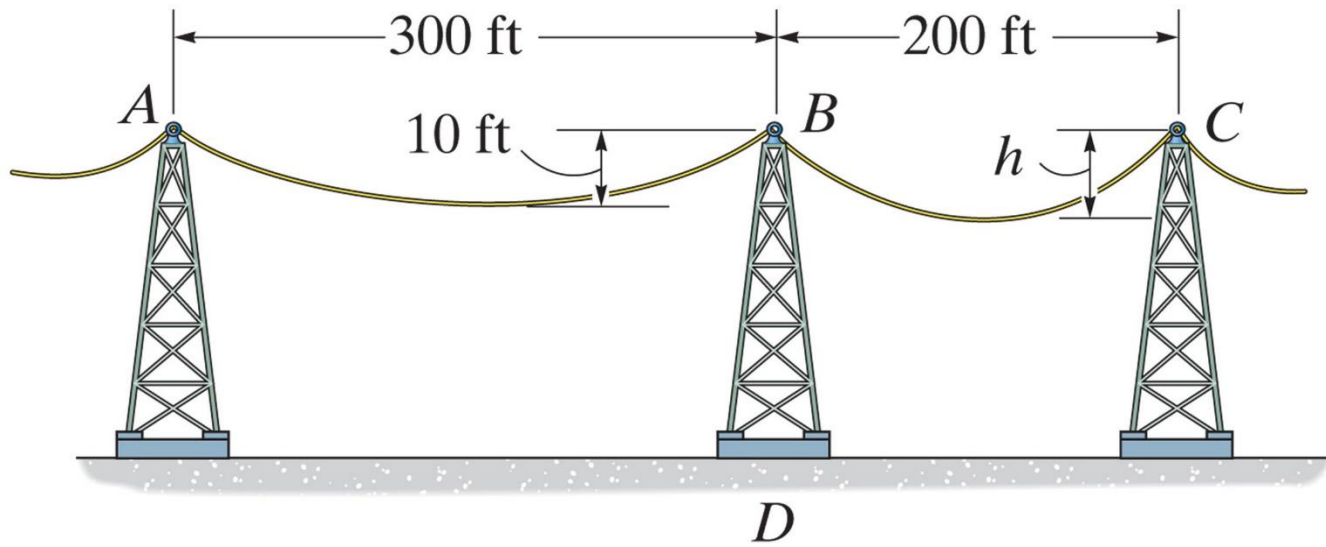




Determine the maximum force developed in the cable and the cable's required length. The span length and sag are known.

# Cable subjected to its own weight





Determine the resultant horizontal and vertical forces the cables exert on tower BD.