

Homework Problem 4.F

Given: The pole is loaded as shown and is restrained by a ball and socket at O, two cables (CD and AB) and a load L.

Find:

- Determine the tensions in cables CD and AB.
- Determine the reactions at O and express as a vector.

Use the following parameters in your work: $|L| = 210$ lb, $x_A = 6$ ft, $x_E = 5$ ft, $x_C = 3$ ft, $d = 4$, $h = 3$ ft and $b = 2$ ft.

