# **3D Signpost - Exercises**

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## **Exercises**

#### Exercise 1:

Repeat the same analysis as in the tutorial using hollow tubes for the post with outer-to-inner diameter ratios of 1.1, 1.3, and 1.5. How do these designs compare with that for the solid post?

### **Exercise 2:**

Investigate the effect of the approximation of the sign weight as a uniformly distributed load by replacing it with a gravity body force loading.

#### Exercise 3:

Investigate a similar refinement of the model by replacing the uniform weight loading of the post by a gravity body force.

#### Exercise 4:

Holding loadings constant and varying a single load at a time, what wind and weight loadings would be required to exceed the design criteria for loading the signpost?

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