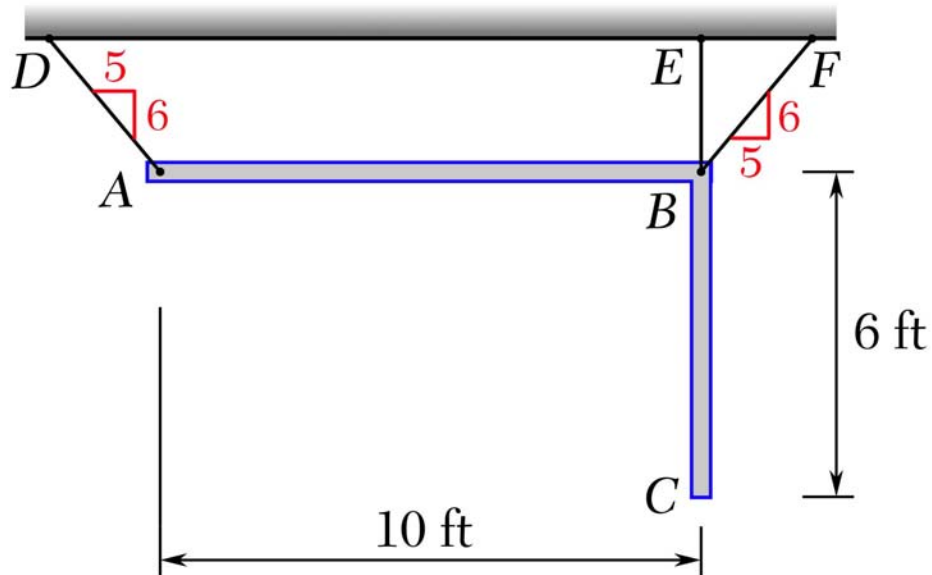# MEEG 2013   Quiz #6

A bent rod weighing 2 lb/ft is suspended as shown. Determine its angular acceleration $\boldsymbol{\alpha}$ and the wire tensions F_{AD} and F_{BE} immediately after the wire BF is cut.

Answer:

Diagram Equation: $FBD = EFD$ ④

$\boldsymbol{\alpha} = 0.707 \text{ rad/s}^2 \ \circlearrowleft$ ②

$F_{AD} = 11.93 \text{ lb}$ ②

$F_{BE} = 20.6 \text{ lb}$ ②