## Name:

$\qquad$

1. The distance $h=9 \mathrm{in}$, and the tension in cable $A D$ is 200 lb . What are the tensions in cables $A B$ and $A C$ ?

2. The $20-\mathrm{kg}$ mass is suspended by cables attached to three vertical 2-m posts. Point $A$ is at $(0,1.2,0) \mathrm{m}$. Determine the tensions in cables $A B, A C$, and $A D$.

3. The tension in cable $A B$ is 80 lb . What is the moment about the line $C D$ due to the force exerted by the cable on the wall at $B$ ? Express the answer as a Cartesian vector.

4. Replace the distributed loading by an equivalent resultant force and specify its location, measured from point $A$.

