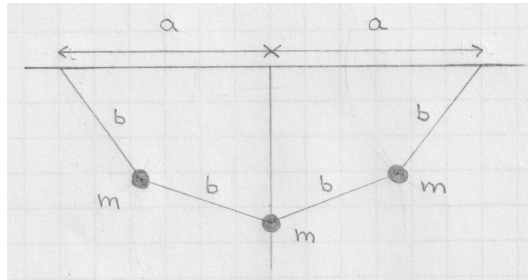


[mex278] Catenary problem I

Consider three small metal spheres of mass m linked by four massless threads of length b each, into a chain and suspended from two fixed points which are a distance $2a$ horizontally apart as shown, assuming $a = 1\text{m}$ and $b = 0.7\text{m}$. Find the vertical distance of all spheres from the ceiling.



Solution: