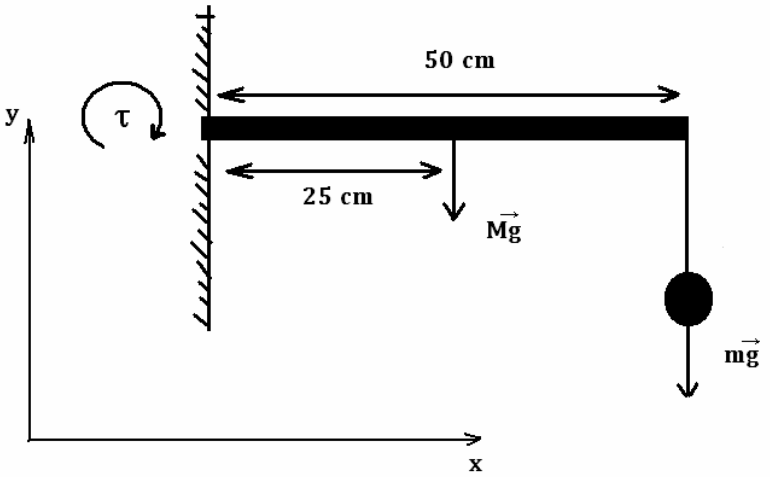
QUESTION:
A uniform 2.0 kg horizontal beam 50 cm long is bolted to a brick wall and supports a 5.0 kg lighting fixture. Calculate the torque produced by the combined weight of the beam and the light about the point where the beam meets the wall

SOLUTION:
Let's draw a sketch. As beam is uniform, its center of mass is in the middle.



There are two forces that have torque about the point where the beam meets the wall: $m\vec{g}$ and $M\vec{g}$. Hence, the torque is

$$\tau = mgl + Mg\frac{l}{2}$$

Here l=50 cm is the length of the beam.

$$\tau = 5 \cdot 9.8 \cdot 0.5 + 2 \cdot 9.8 \cdot 0.25 = 29.4 \ \ N \cdot m$$

ANSWER:
29.4 N·m