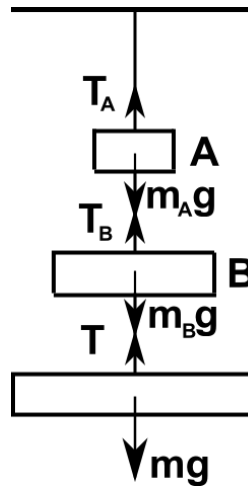


Answer on Question 49432, Physics, Other

Question:

A body of mass 2kg is suspended through two light spring balances A and B. Then mass of the A and B are?

Solution:



Let's draw a free-body diagram. From the diagram we can see that $T_A + T_B + T - m_A g - m_B g - mg = 0$. Because the balances A and B are massless, the tension on the each spring will be the same. Therefore, $T_A = T_B = T$, $m_A = m_B = m = 2\text{kg}$.

Answer:

Mass of the A and B are 2kg.