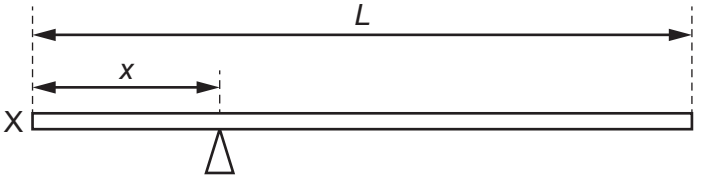
14 The diagram shows a uniform bar of mass M and length L resting on a pivot at a distance x from end X.



An object of mass m is placed on the bar at distance y from the pivot so that the bar is in equilibrium.

What is an expression for y?

A $\frac{xM}{m}$ **B** $\frac{M}{m}(L-x)$ **C** $\frac{M}{2m}(L-2x)$ **D** $\frac{1}{m}(Lm-xM)$