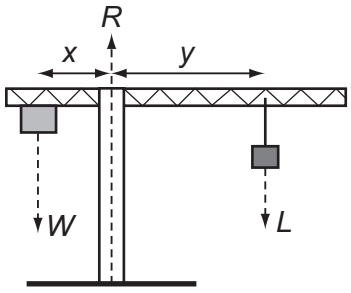
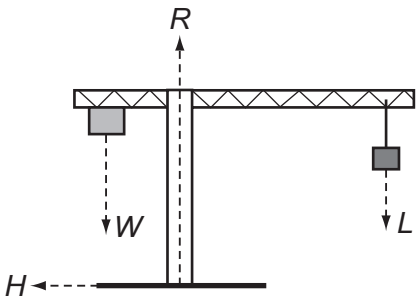
13 The diagram shows a crane supporting a load *L*.



A mass provides a balancing load *W*. The position of the load is such that the system is perfectly balanced with $Wx = Ly$. The ground provides a reaction force *R*. The distance *x* does not change.

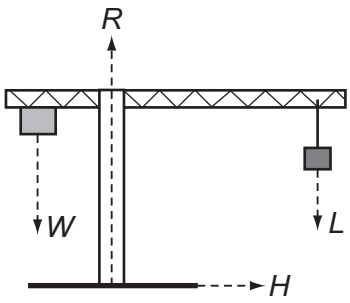
If the load is moved further out so that the distance *y* increases and the crane does not topple, which statement is correct?

A



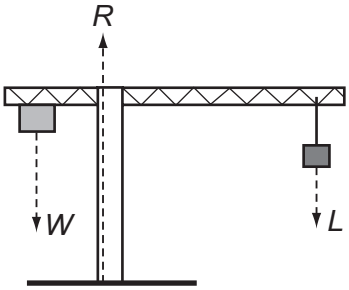
A horizontal force *H* acts on the base of the support column towards the left.

B



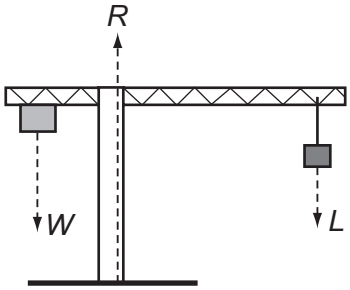
A horizontal force *H* acts on the base of the support column towards the right.

C



The reaction force *R* moves to the left.

D



The reaction force *R* moves to the right.

Space for working