When you keep an object motionless, you are doing resistive work?

Solution

If there is some resistive force to a movement, then work is required to move the object. If you want to lift an object from the floor to a table, you must work against the force of gravity.

When you hold a box, your body is expending energy as you apply a force against gravity to hold the object up. However, you are not moving the object, so you are not really doing work against a resistive force.

Answer

No