Answer on Question #48831, Physics, Mechanics | Kinematics | Dynamics

How many joules of work are done if you carry a box that weights 34 newtons up a ladder for a distance of 2 meters?

Solution:

In order to accomplish work on an object there must be a force exerted on the object and it must move in the direction of the force.

Work = Force * distance moved in direction of force

$$W = Fd = 34 * 2 = 68 \text{ J}$$

Answer: $W = 68$ J.