Answer on Question #77097 - Chemistry - Physical Chemistry

Question:

An object of mass 12 kg is pushed up a frictionless slope with a 35° angle to the horizontal over a distance of 22 m by an 82 N force. Calculate the following:

i) the work done on the object;

ii) the potential and kinetic energy imparted to the object.

Solution:

$$w=Fd$$

with

w is work
F is opposing force
d is distance
w = 82*22 = 1804 N*m.