Answer on Question 57692, Physics, Mechanics, Relativity

Question:

A loaded cart has a total mass of $227\ kg$. If a $312\ N$ force acting at an angle of $30°$ to the ground is applied, how much work is done in moving the cart $15\ m$?

Solution:

By the definition of the work we have:

$$W = Fscos\theta = 312\ N \cdot 15\ m \cdot cos30° = 4053\ J.$$

Answer:

$W = 4053\ J.$