Answer on Question 63039, Physics, Mechanics, Relativity

Question:

Wall-E does $750\,J$ of work pushing a block of rubbish $15\,m$. Calculate the force he is pushing with.

Solution:

By the definition of the work done we have:

$$W = Fs,$$

here, W is the work done by Wall-E, F is the force acting on a block of rubbish, s is the distance.

From this formula we can calculate the force acting on a block of rubbish:

$$F = \frac{W}{s} = \frac{750\,J}{15\,m} = 50\,N.$$

Answer:

$F = 50\,N.$