Answer on Question #37705 - Physics- Others

A work of 500 Joules is done when a force of 20 Newton is applied to a cart. Calculate the distance through which a cart moves and states its direction

Solution:

$$\text{Work} = \text{force} \cdot \text{distance} \Longrightarrow \text{distance} = \frac{\text{Work}}{\text{force}} = \frac{500\text{J}}{20\text{N}} = 25\text{m}$$

Answer: the distance through which a cart moves is equal to 25 meters in the direction of the force.