

Work by Constant Force

- **Example:** You pull a 30 N chest 5 meters across the floor at a constant speed by applying a force of 50 N at an angle of 30 degrees. How much work is done by the 50 N force?

$$\begin{aligned}W &= F \Delta x \cos \theta \\&= (50 \text{ N}) (5 \text{ m}) \cos (30) \\&= 217 \text{ Joules}\end{aligned}$$

