

Mohammed Sobhi

حل التمرين 04

1.

$$W(\vec{F}) = \vec{F} \cdot \vec{AB} = F.d.\cos\pi$$

$$W(\vec{F}) = -F.d$$

$$W(\vec{F}) = -2.10^4 \text{ J}$$

2.

$$P = \frac{\vec{F} \cdot \vec{AB}}{\Delta t} = \vec{F} \cdot \frac{\vec{AB}}{\Delta t} = \vec{F} \cdot \vec{v}$$

$$P = Fv \cos\pi = -Fv$$

$$P = -20 \times \frac{24.10^3}{3600} = -133,34 \text{ W}$$

