

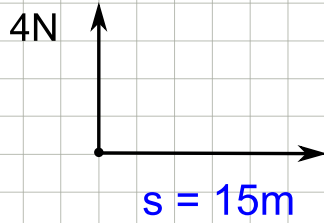
## Esercizi sul calcolo del lavoro

Determinare il lavoro delle forze assegnate per gli spostamenti assegnati

$$L = 5 \text{ N} \cdot 12,5 \text{ m} \cdot \cos 180^\circ = -62,5 \text{ J}$$

7,5m

$$L = 4 \text{ N} \cdot 15 \text{ m} \cdot \cos 90^\circ = 0 \text{ J}$$

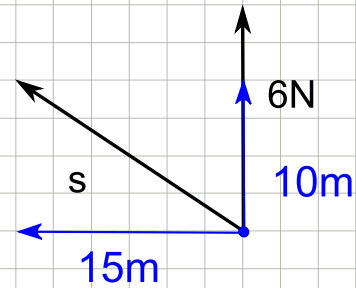
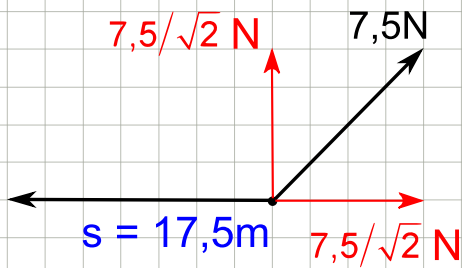


5N  
s = 12,5m

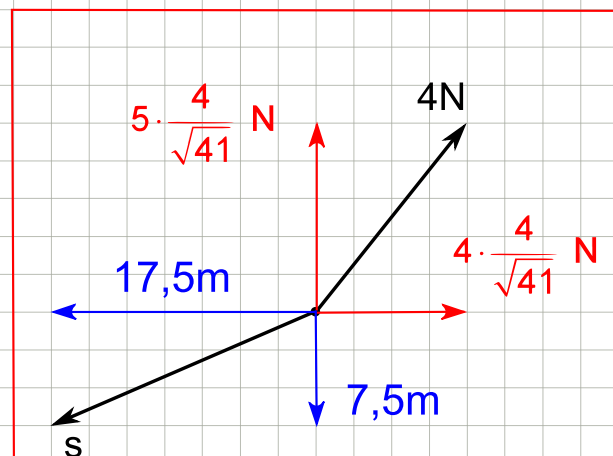
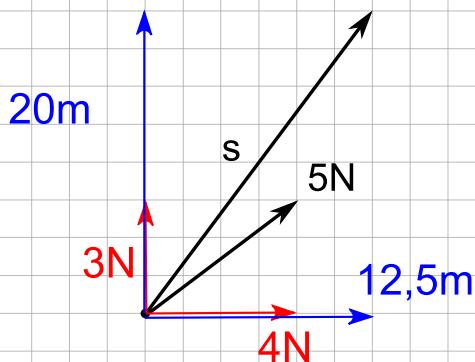


$$L = \frac{7,5}{\sqrt{2}} \text{ N} \cdot 17,5 \text{ m} \cdot \cos 180^\circ \approx -92,81 \text{ J}$$

$$L = 6 \text{ N} \cdot 10 \text{ m} = 60 \text{ J}$$



$$L = 3 \text{ N} \cdot 20 \text{ m} + 4 \text{ N} \cdot 12,5 \text{ m} = 110 \text{ J}$$



$$L = -\frac{20}{\sqrt{41}} \text{ N} \cdot 7,5 \text{ m} - \frac{16}{\sqrt{41}} \text{ N} \cdot 17,5 \text{ m} \approx -67,15 \text{ J}$$