

Climbing gymnast

$$\text{Power} = \text{Force} \times \text{velocity}$$

$$= (\text{tension force pulling up on gymnast}) (\text{speed of ascending gymnast})$$

$$= (50 \text{ kJ})(10^{-4} \text{ s}^{-1}) \left(\frac{10 \text{ meters}}{5 \text{ seconds}} \right)$$

$$= \frac{50 \cdot 10 \cdot 10}{5} = 1000 \text{ Watts}$$
$$= 1 \text{ kW}$$