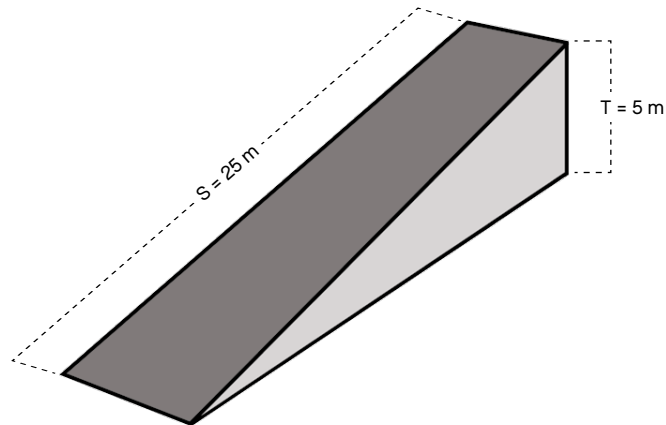# The mechanical advantage of a wedge

The ideal mechanical advantage of a wedge describes the relationship between the length of the sloping side of the wedge and the height at the thickest end of the wedge. The mechanical advantage can be calculated using the following formula:

$$\text{Mechanical advantage} = \frac{\text{Slope}}{\text{Thickness}}$$

$$\text{Mechanical advantage} = \frac{25\text{ m}}{5\text{ m}}$$

$$\text{Mechanical advantage} = 5$$

Hint:
The sharper the angle of the wedge, the more mechanical advantage it will have.