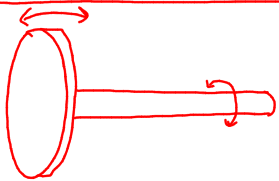




Wheel and axle

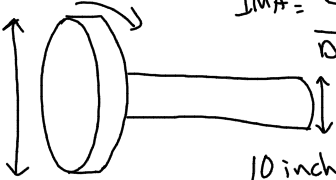


one drives the other
 wheels on a wagon are not considered to be a simple machine

Door Knob  wheel turns axle

motor  Fan axle turns wheel

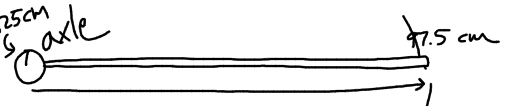
IMA for wheel and axle



$$IMA = \frac{\text{Diameter of what you turn}}{\text{Diameter of what gets turned}}$$

$$\frac{10 \text{ inches}}{3 \text{ inches}} = 3\frac{1}{3}$$

$\frac{2 \text{ radius}}{2 \text{ radius}}$



$$IMA = \frac{1.25 \text{ cm}}{97.5 \text{ cm}} = .013 \quad \text{Wheel}$$

$$\frac{97.5 \text{ cm}}{1.25} = 78$$