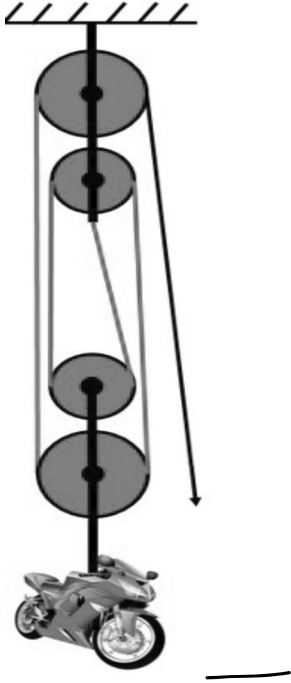


Name: Adm Shah

Given the pulley in the figure below. $F_e = 117$ lbs, which lifts a motorcycle, $F_r = 360$ lbs, What is the

(a) IMA (b) AMA (c) Efficiency (precision of 0.1)?



$$\begin{aligned} \text{IMA} &= \frac{\text{num of segs}}{D_e} = 4 \\ \text{AMA} &= \frac{F_r}{F_e} = \frac{360}{117} \end{aligned}$$

$$\text{Eff} = \frac{\text{AMA}}{\text{IMA}} = \frac{3.1}{4}$$

$$= 0.775$$

$$77.5\%$$

Write ONLY answers below this line _____

Set23

a: 4

b: 3.1

c: 77.5%