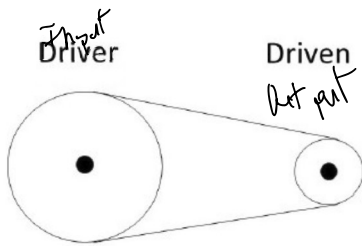


Name: Evan Robinson

For the system of sprockets pictured, when driver sprocket = 70 cm, driven sprocket = 22 cm, and the output torque is 84 N-m, what is the input torque (precision of 0.01)?



$$f = \frac{22}{70}$$

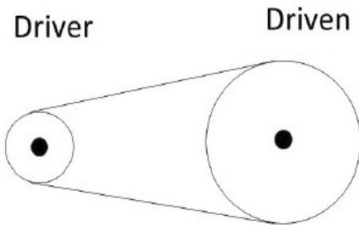
$$T_{in} \cdot \frac{T_{out}}{T_{in}} = \frac{314}{-314}$$

$$\frac{22}{70}$$

$$\frac{22}{70} = 0.314$$

$$\frac{84}{0.314} = 267.52$$

For the system of sprockets pictured, when driver sprocket = 18 cm, driven sprocket = 68 cm, and the output torque is 66 N-m, what is the input torque (precision of 0.01)?



$$\frac{68}{18} = 3.78$$

$$\frac{66}{3.78} = 17.46$$

Write ONLY answers below this line \_\_\_\_\_

SPRSet11

a: 267.52

b: 17.46