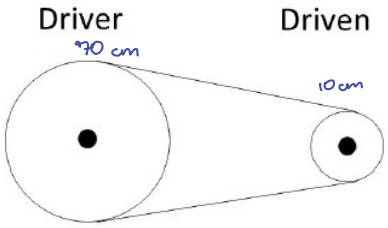
Name: Rhyan Ballard

For the system of sprockets pictured, when driver sprocket = 70 cm, driven sprocket = 10 cm, and the output torque is 40 N-m, what is the input torque (precision of 0.01)?



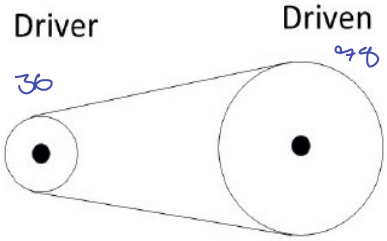
$\frac{\text{Driven}}{\text{Driver}} = \frac{T_o}{T_i}$

$\frac{10}{70} = \frac{40}{x}$

$10x = 2800$

$x = 280$

For the system of sprockets pictured, when driver sprocket = 36 cm, driven sprocket = 78 cm, and the output torque is 76 N-m, what is the input torque (precision of 0.01)?



$\frac{78}{36} = \frac{76}{x}$

$78x = 2736$

$x = 35.08$

Write ONLY answers below this line _____

SPRSet12

a: 280.00

b: 35.08