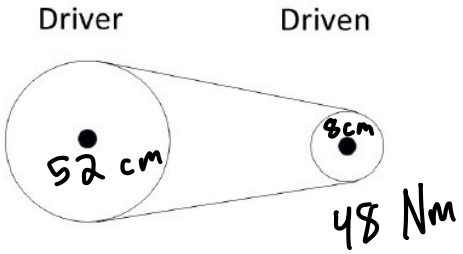
Name: Max Segundo

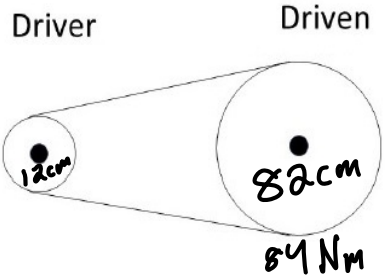
For the system of sprockets pictured, when driver sprocket = 52 cm, driven sprocket = 8 cm, and the output torque is 48 N-m, what is the input torque (precision of 0.01)?



$$\frac{8}{52} = \frac{48}{312}$$

52×6

For the system of sprockets pictured, when driver sprocket = 12 cm, driven sprocket = 82 cm, and the output torque is 84 N-m, what is the input torque (precision of 0.01)?



$$\frac{82}{12} = \frac{84}{x}$$

$$84 \times 12 = 82x$$

$$\frac{1008}{82} = x$$

$$x \approx 12.29$$

Write ONLY answers below this line _____

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a: 312.00

b: 12.29