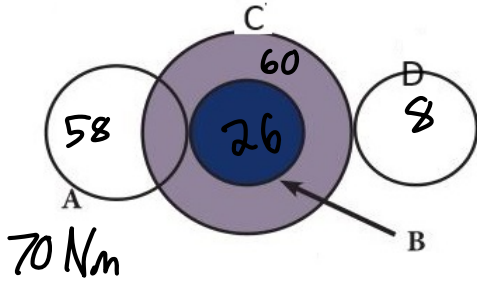


Name: Max Segundo

For the system of gears pictured, when gear A = 56 teeth, gear B = 26 teeth, gear C = 60 teeth, and gear D = 8 teeth, and the input torque is 70 N-m, what is the output torque (precision of 0.01)?



$$\left(\frac{26}{56}\right)\left(\frac{8}{60}\right) = \left(\frac{x}{70}\right)\left(\frac{8}{60}\right)$$

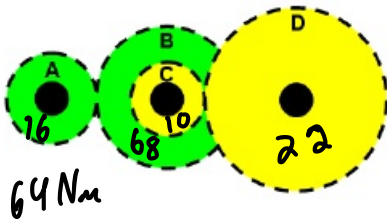
Which Gear?

$$26 \times 70 = 56x$$

$$\frac{1820}{56} = x$$

$$x \approx 31.38$$

For the system of gears pictured, when gear A = 16 teeth, gear B = 68 teeth, gear C = 10 teeth, and gear D = 22 teeth, and the input torque is 64 N-m, what is the output torque (precision of 0.01)?



$$\left(\frac{34}{68}\right)\left(\frac{11}{22}\right) = \left(\frac{x}{64}\right)\left(\frac{11}{9}\right)$$

$$34 \times 64 = 8x$$

$$\frac{2176}{8} = x$$

$$x = 272$$

Write ONLY answers below this line _____

GRSSet22

a: 31.38

b: 272.00