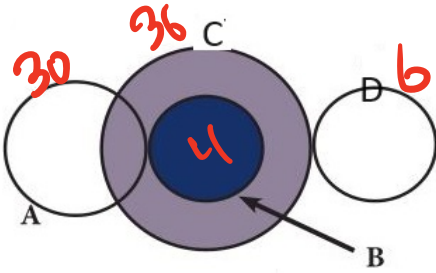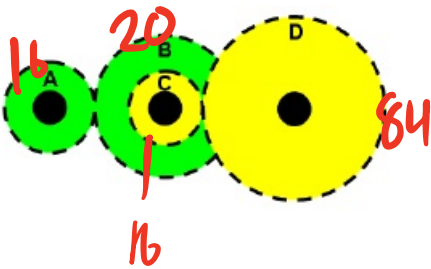Name:_____

For the system of gears pictured, when gear A = 30 teeth, gear B = 4 teeth, gear C = 36 teeth, and gear D = 6 teeth, and the input torque is 70 N-m, what is the output torque (precision of 0.01)?

$$\frac{4}{30} \cdot \frac{6}{36} = \frac{24}{1,080} = \frac{x}{70}$$

$$1.56 \text{ N-m}$$

For the system of gears pictured, when gear A = 16 teeth, gear B = 20 teeth, gear C = 16 teeth, and gear D = 84 teeth, and the input torque is 58 N-m, what is the output torque (precision of 0.01)?

$$\frac{20}{16} \cdot \frac{84}{16} = \frac{1680}{256} = \frac{x}{58}$$

$$X = 380.63 \text{ N-m}$$

Write ONLY answers below this line _____

GRSSet18

a:__1.56_____

b:__380.63__