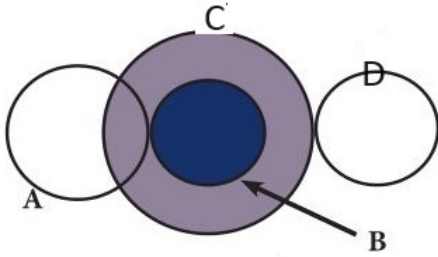


Name: Rhyan Ballard

For the system of gears pictured, when gear A = 56 teeth, gear B = 12 teeth, gear C = 66 teeth, and gear D = 32 teeth, and the input speed is 92 rpm, what is the output speed (precision of 0.01)?



$$\frac{92}{x}$$

$$\frac{66}{56} = \frac{12}{56} = \frac{3}{14}$$

$$\frac{66}{66} = \frac{32}{66} = \frac{16}{33}$$

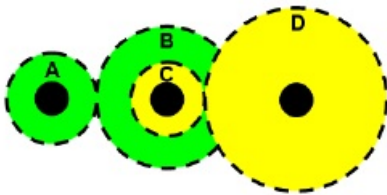
$$\frac{3}{14} \cdot \frac{16}{33} = \frac{16}{154}$$

$$\frac{16}{154} = \frac{92}{x}$$

$$16x = 14108$$

$$x = 882.5$$

For the system of gears pictured, when gear A = 10 teeth, gear B = 70 teeth, gear C = 34 teeth, and gear D = 76 teeth, and the input speed is 86 rpm, what is the output speed (precision of 0.01)?



$$\frac{86}{x}$$

$$\frac{76}{10} = \frac{7}{1}$$

$$\frac{76}{34} = \frac{38}{17}$$

$$\frac{7}{1} \cdot \frac{38}{17} = \frac{266}{17}$$

$$\frac{266}{17} = \frac{86}{x}$$

$$266x = 1462$$

$$x = 5.50$$

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

GRSSet52

a: 882.50

b: 5.50