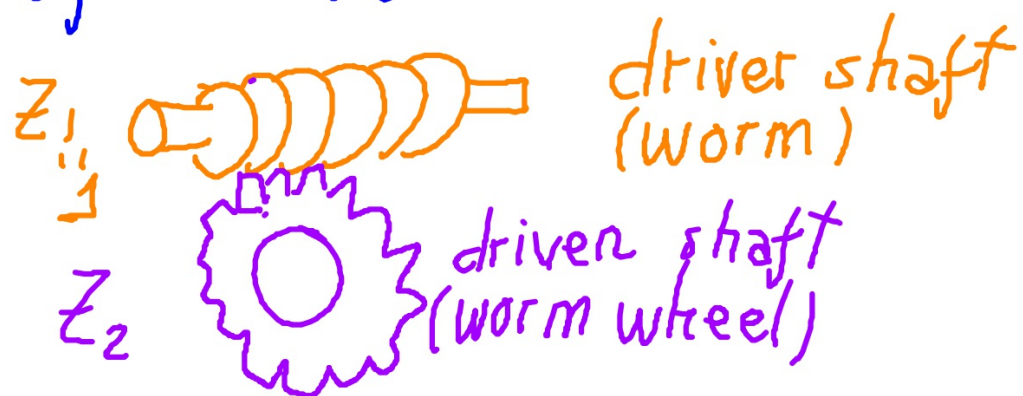


2.- We have a system formed by a worm gear mechanism with 40 teeth that rotates at 100 rpm. Calculate the speed of rotation of the worm.



$$\frac{Z_1}{Z_2} = \frac{N_2}{N_1} ; N_1 = N_2 \cdot \frac{Z_2}{Z_1}$$

Z_1 = teeth of the worm

Z_2 = " " " worm wheel

N_1 = speed of the worm

N_2 = " " " worm wheel

$$N_1 = 100 \text{ rpm} \cdot \frac{40 \text{ teeth}}{1 \text{ teeth}} = \underline{\underline{4000 \text{ rpm}}}$$