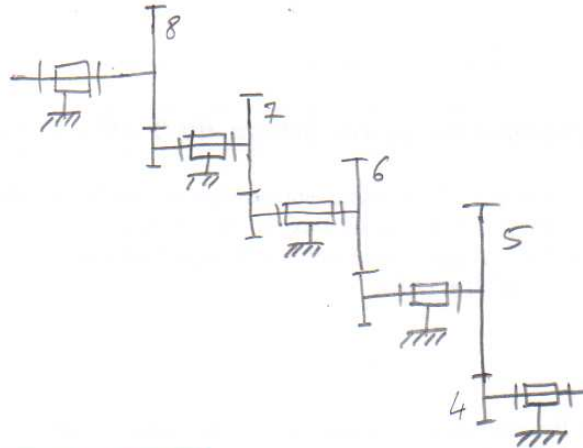


2129

Exercice 1

$$k = \frac{z_4}{z_5} \cdot \frac{z_5'}{z_6} \cdot \frac{z_6'}{z_7} \cdot \frac{z_7'}{z_8}$$

$$k = \frac{12}{50} \cdot \frac{12}{28} \cdot \frac{12}{28} \cdot \frac{12}{60} = \underline{8,8 \cdot 10^{-3}} = \frac{1}{113}$$

21241

Exercice 2

$$k_2 = \frac{z_8}{z_3} \cdot \frac{z_9}{z_4} = \frac{\omega_{4/0}}{\omega_{8/0}}$$

21244

Exercice 3

$$k_3 = \frac{z_9}{z_8} = \frac{1}{25}$$

Exercice 4

$$k = \frac{\omega_{10/23}}{\omega_{18/10}}$$

$$\frac{\omega_{23/10}}{\omega_{18/10}} = \frac{D_{18}}{D_{23}}$$

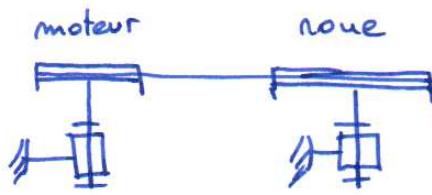
$$k = \frac{\omega_{10/23}}{\omega_{18/10}} = - \frac{D_{18}}{D_{23}}$$

21250

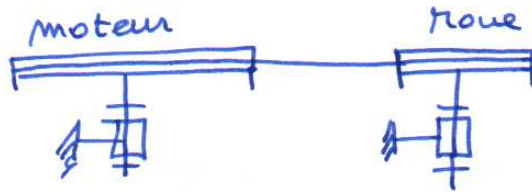
Exercice 5

① Engrenage cylindrique droit

② L'augmentation de la taille des dents se justifie par l'augmentation du couple transmis dans le réducteur, de même que le passage du plastique au métal.

③ Schéma cinématiquePetite vitesse

$$k = \frac{r}{R} = \frac{1}{3}$$

grande vitesse

$$k = \frac{R}{r} = 3$$

22h03