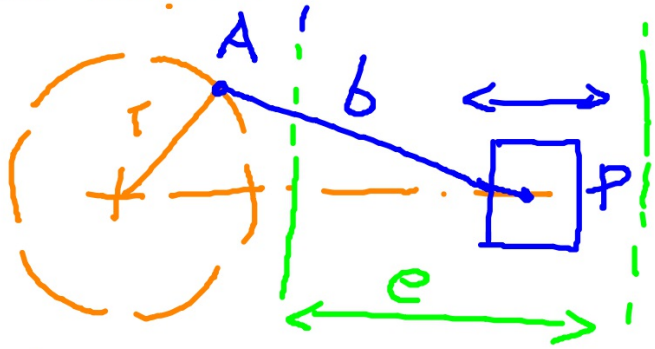
3.- CRANK AND CONNECTION ROD



$$V_p = \frac{2ne}{1000 \cdot 60} \quad (m/s)$$

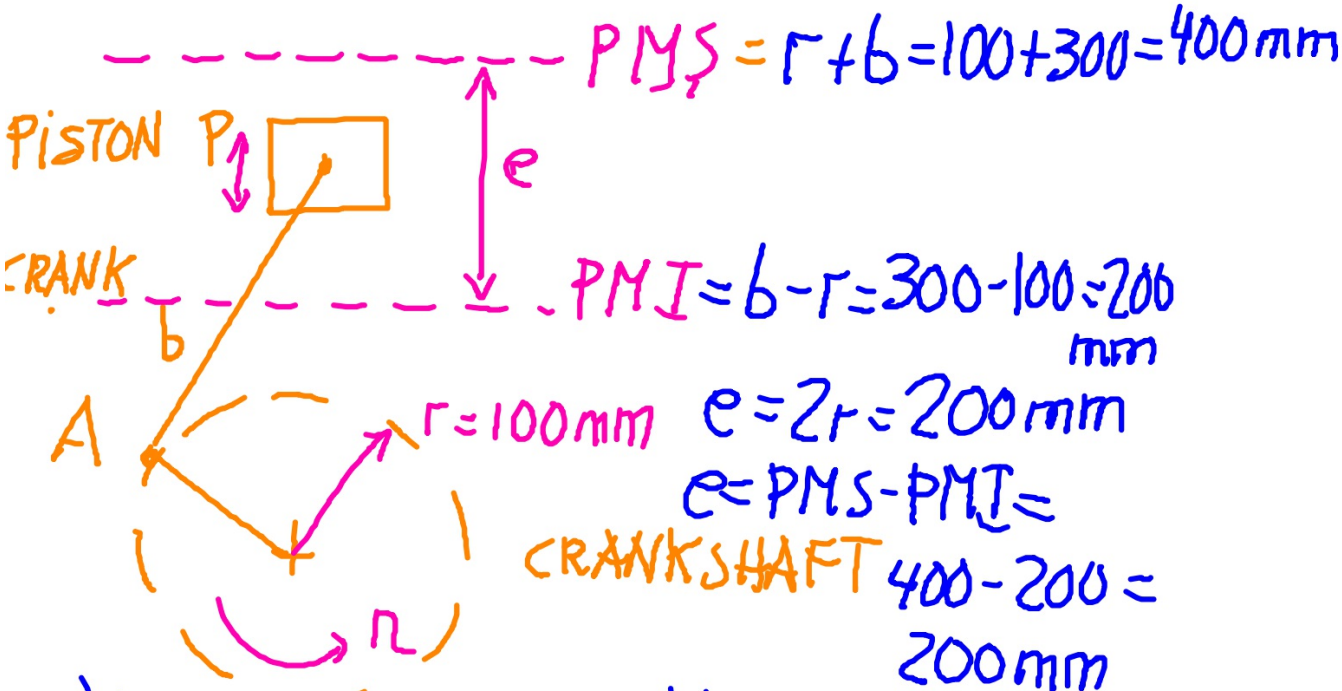
$$e = 2r \quad (mm)$$

The following image shows a diesel motor. The piston moves with a speed of $V_p = 12$ m/s. By means of a crank of 300 mm (b), the piston moves the connection rod and this moves the crankshaft. The radio of the connection rod is 100 mm (r).

Calculate:

1) PMS and PMI and e

2) Ω



2) $V_p = \frac{2ne}{1000 \cdot 60}$; $n = \frac{V_p \cdot 1000 \cdot 60}{2e} =$

$n = \frac{12\ m/s \cdot 1000 \cdot 60}{2 \cdot 200} = 1800\ rpm$