$$V\_{O}=ω\*OP⇒OP=\frac{V\_{0}}{ω}=\frac{1.2m/se}{5/se}=0.24m$$

en traçant les lignes on trouve le CIV(P), voir le schéma

P

A

الشكل 2

C

ω

V0

r=10cm

B

VD

VA

VB

VC

K

H

d'après le triangle on a $ΔPOD,ΔPHK$

$\frac{V\_{O}}{OP}=\frac{V\_{B}}{BP}$

$$BP=OP-OB=0.24-0.1=0.14 m$$

$$V\_{B}=V\_{O}\*\frac{BP}{OP}=1.2\*\frac{0.14}{0.24}=0.7m/sec$$

$$V\_{A}=ω\*AP=5\left(r+OP\right)=5\*\left(0.24+0.1\right)=1.7m/sec$$

$$V\_{D}=V\_{C}⇒V\_{D}=ω\*PD=ω\*CP$$

$$CP=DP=\sqrt{OD^{2}+OP^{2}}=\sqrt{(0.24)^{2}+(0.1)^{2}}=\sqrt{0.0676}=0.26m$$

$$V\_{D}=V\_{C}⇒V\_{D}=5\*0.26=1.3m/sec$$