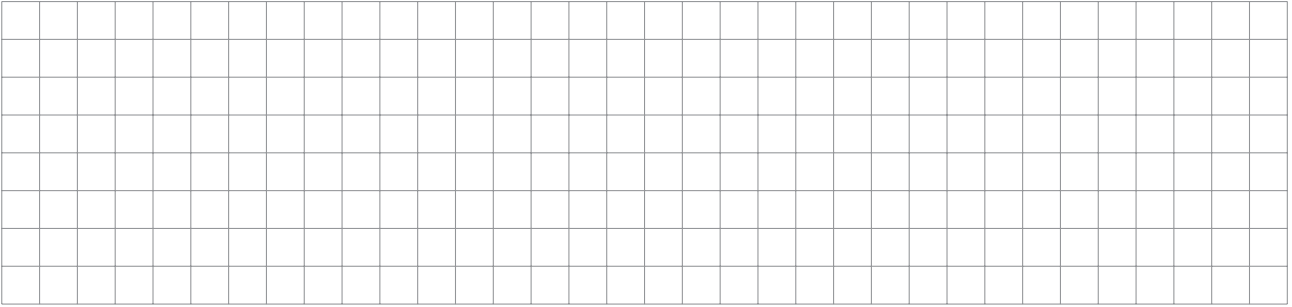




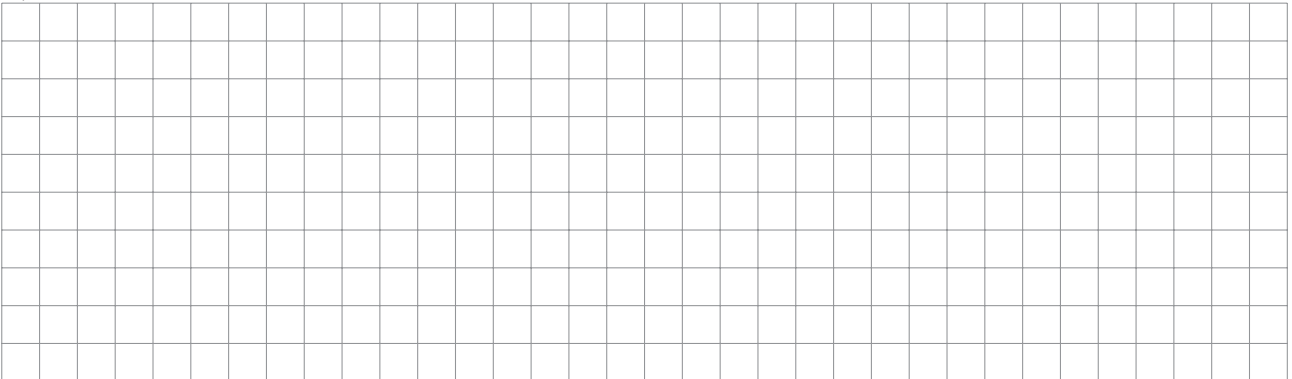




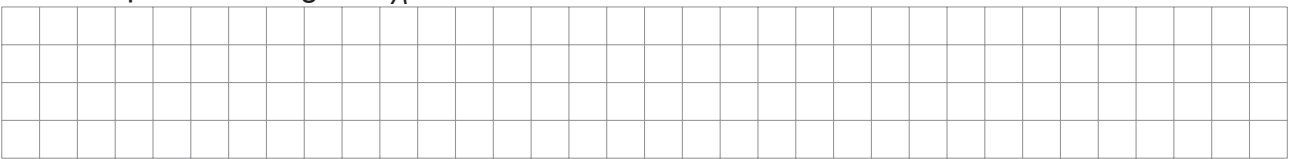
**Q14** - Dimensionnement du moteur en phase de démarrage et en phase à vitesse constante



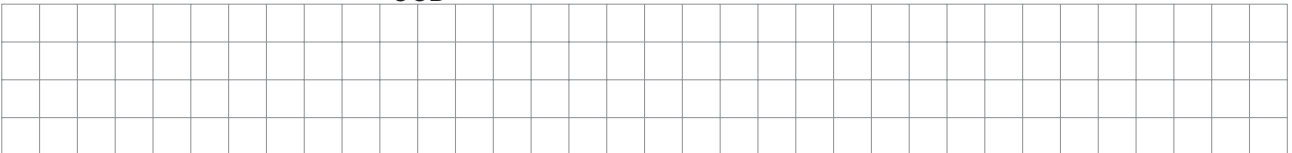
**Q15** - Schéma-bloc de la structure d'asservissement



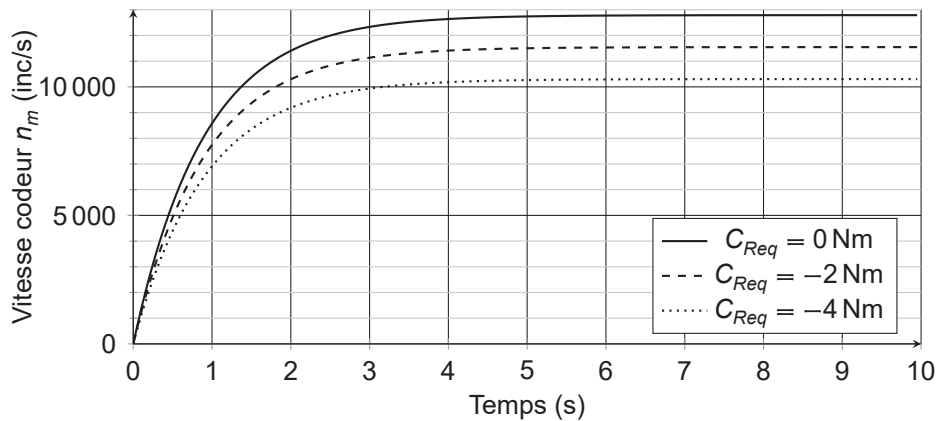
**Q16** - Expression du gain  $K_A$



**Q17** - Expression du gain  $K_{COD}$



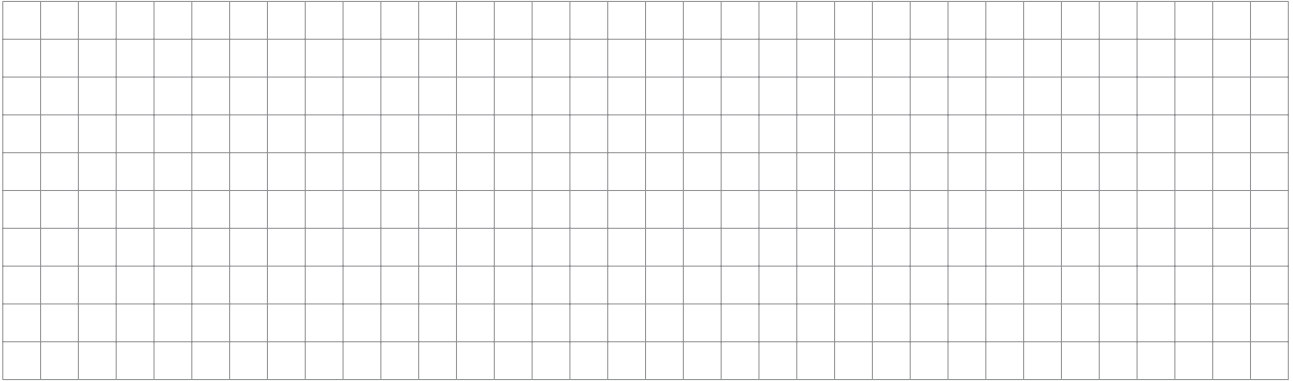
**Q18** - Identification de  $K_{pert}$  et  $H_m(p)$



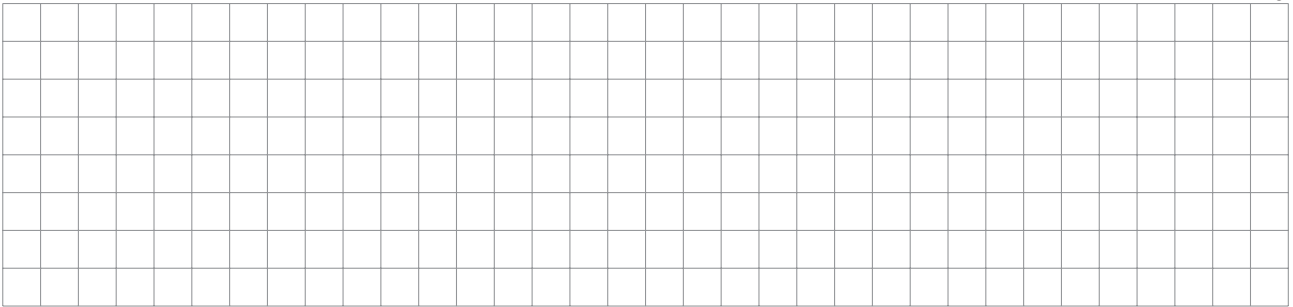


NE RIEN ÉCRIRE DANS CE CADRE

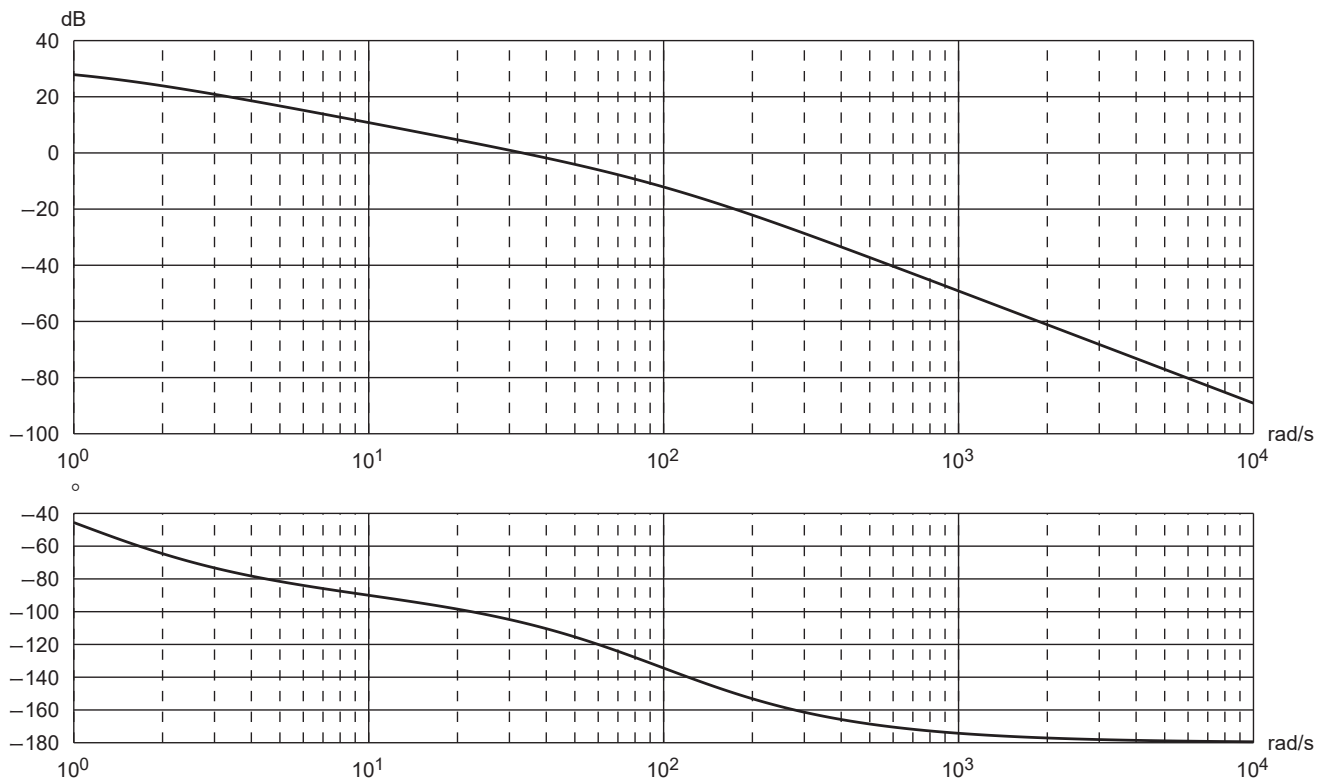
**Q20** - Expression du temps de réponse à 5 %. Application numérique et conclusion

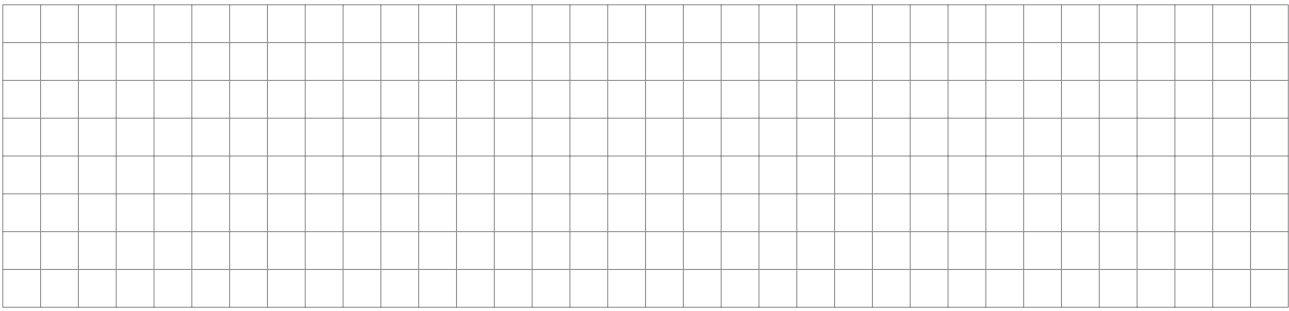


**Q21** - Expression de l'erreur statique ajoutée par une perturbation en échelon de valeur  $C_{R0}$

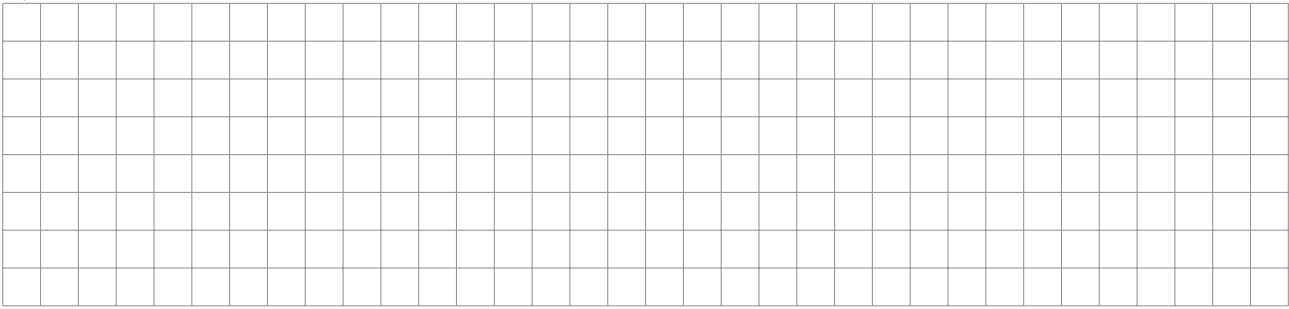


**Q22** - Marge de phase et marge de gain. Valeur de  $K_P$  pour vérifier le cahier des charges

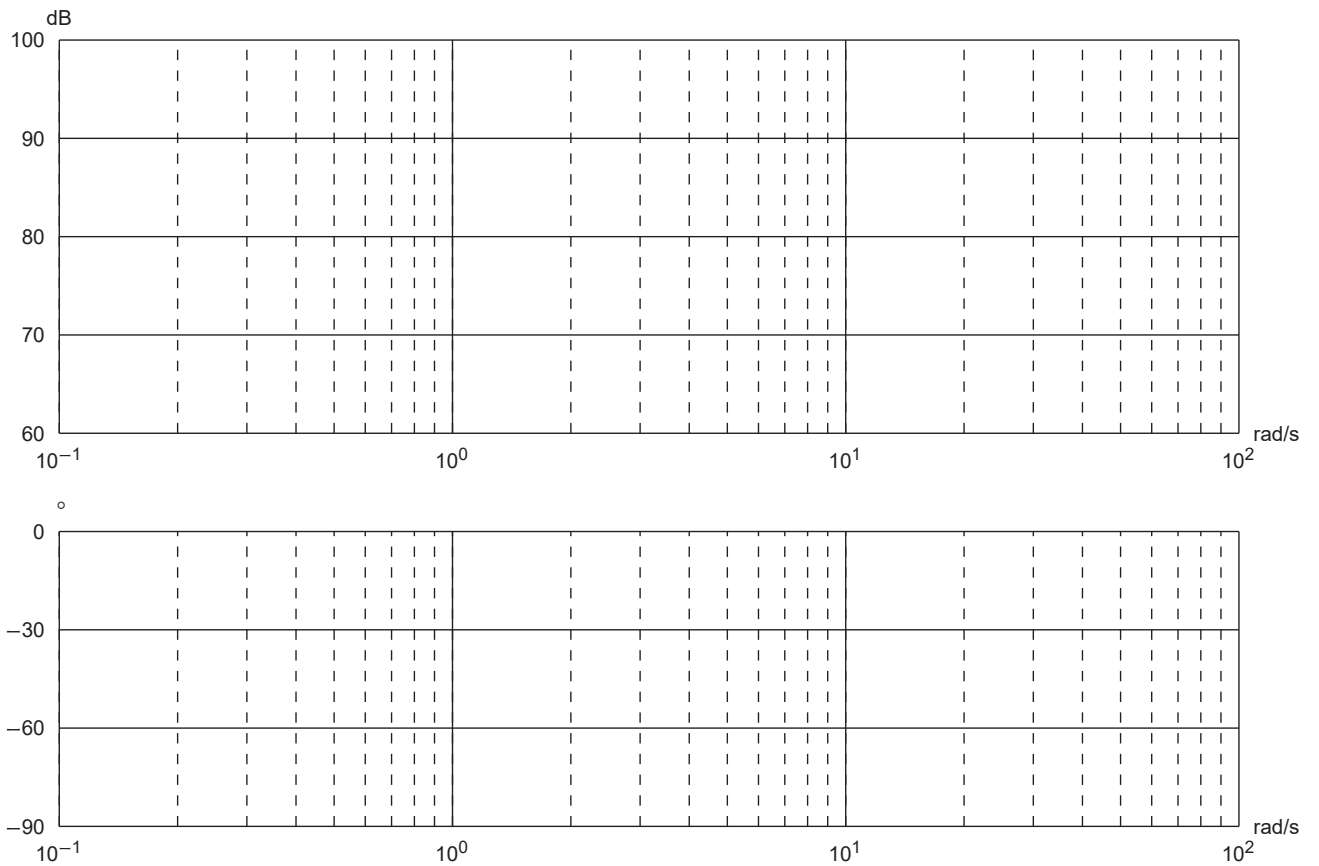




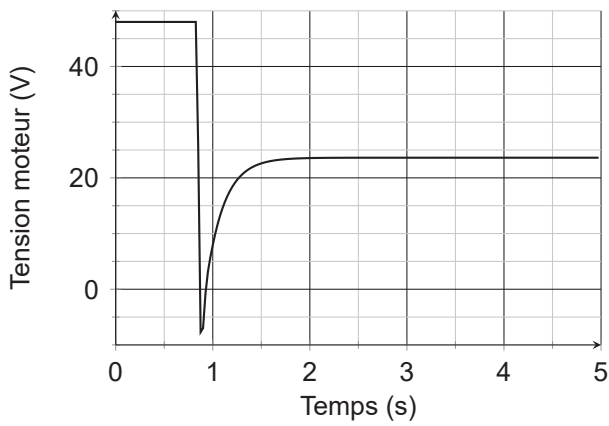
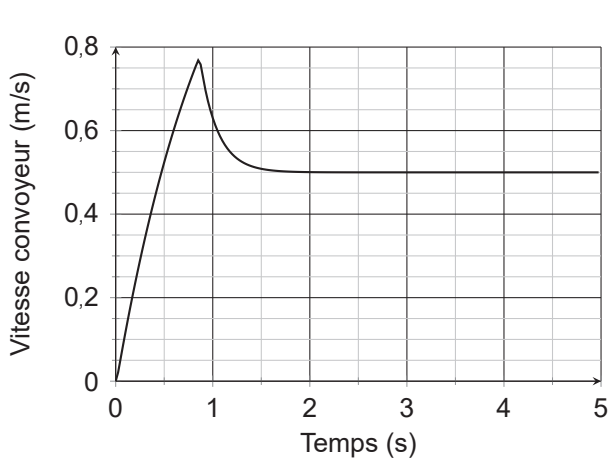
**Q23 - Justification du correcteur**



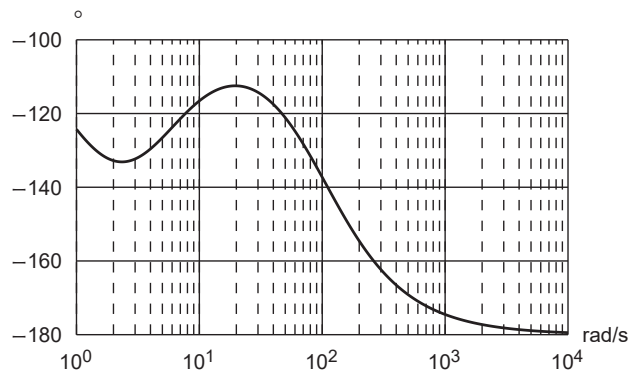
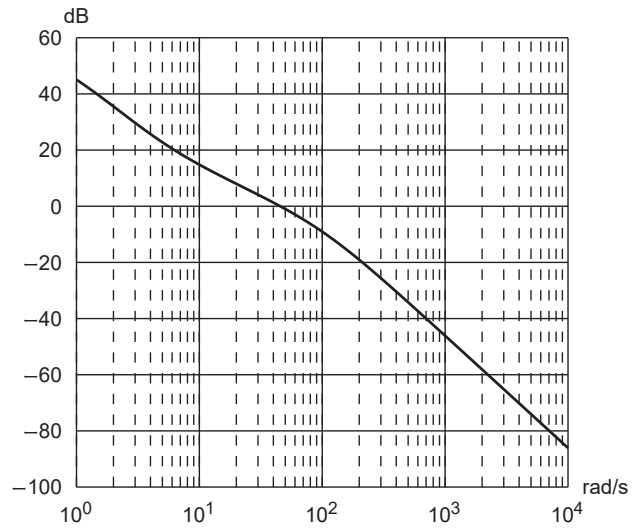
**Q24 - Diagrammes de Bode du correcteur**



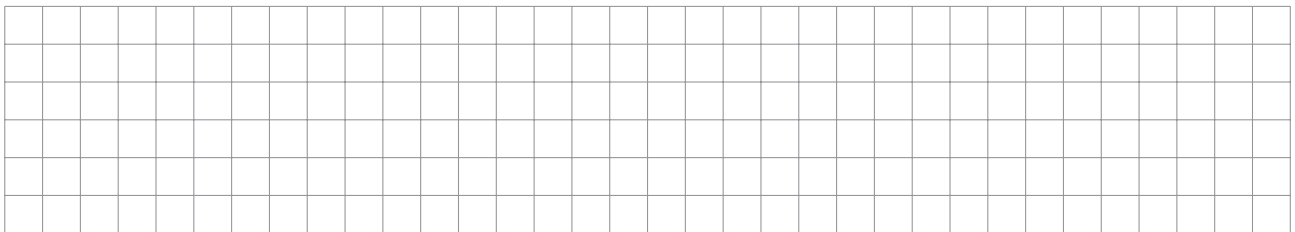
**Q25 - Vérification du cahier des charges**



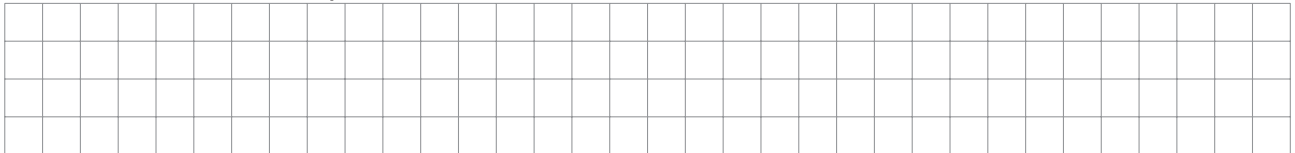
Réponse temporelle



Diagrammes de Bode de la FTBO corrigée



**Q26 - Intervalle de temps de la saturation. Grandeur saturée et valeur**



**Q27 - Expression de  $h_{lm}$ . Application numérique**

