

DOCUMENT REponses

NOM : \_\_\_\_\_ PRENOM : \_\_\_\_\_

Problème

Q9

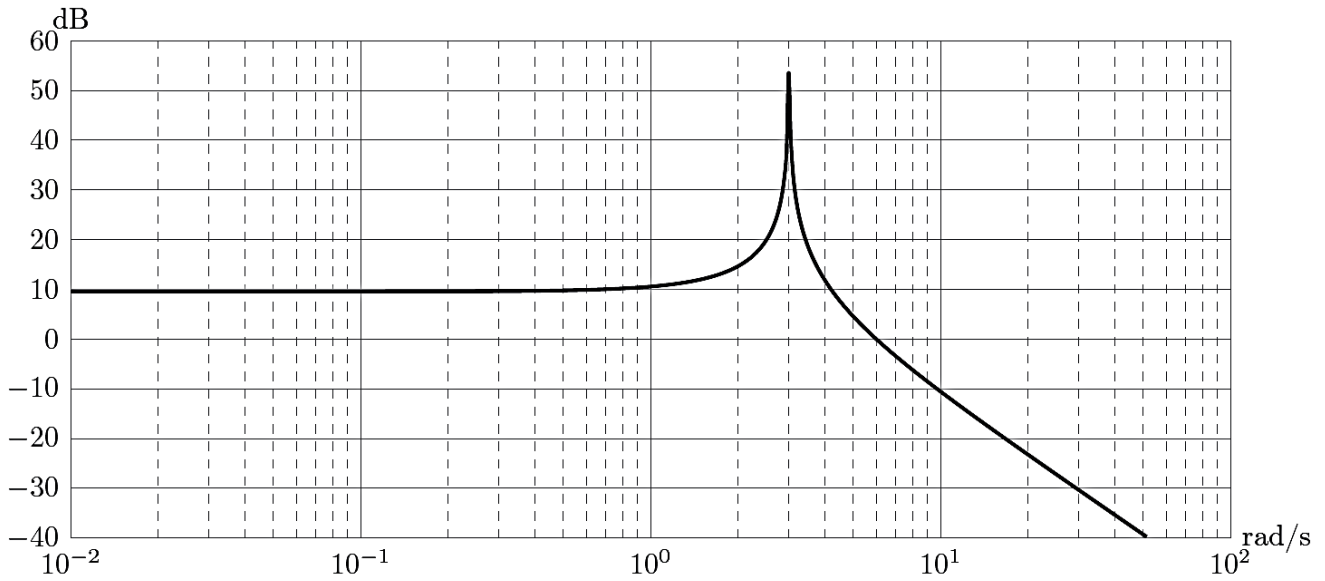


FIGURE A

Q16

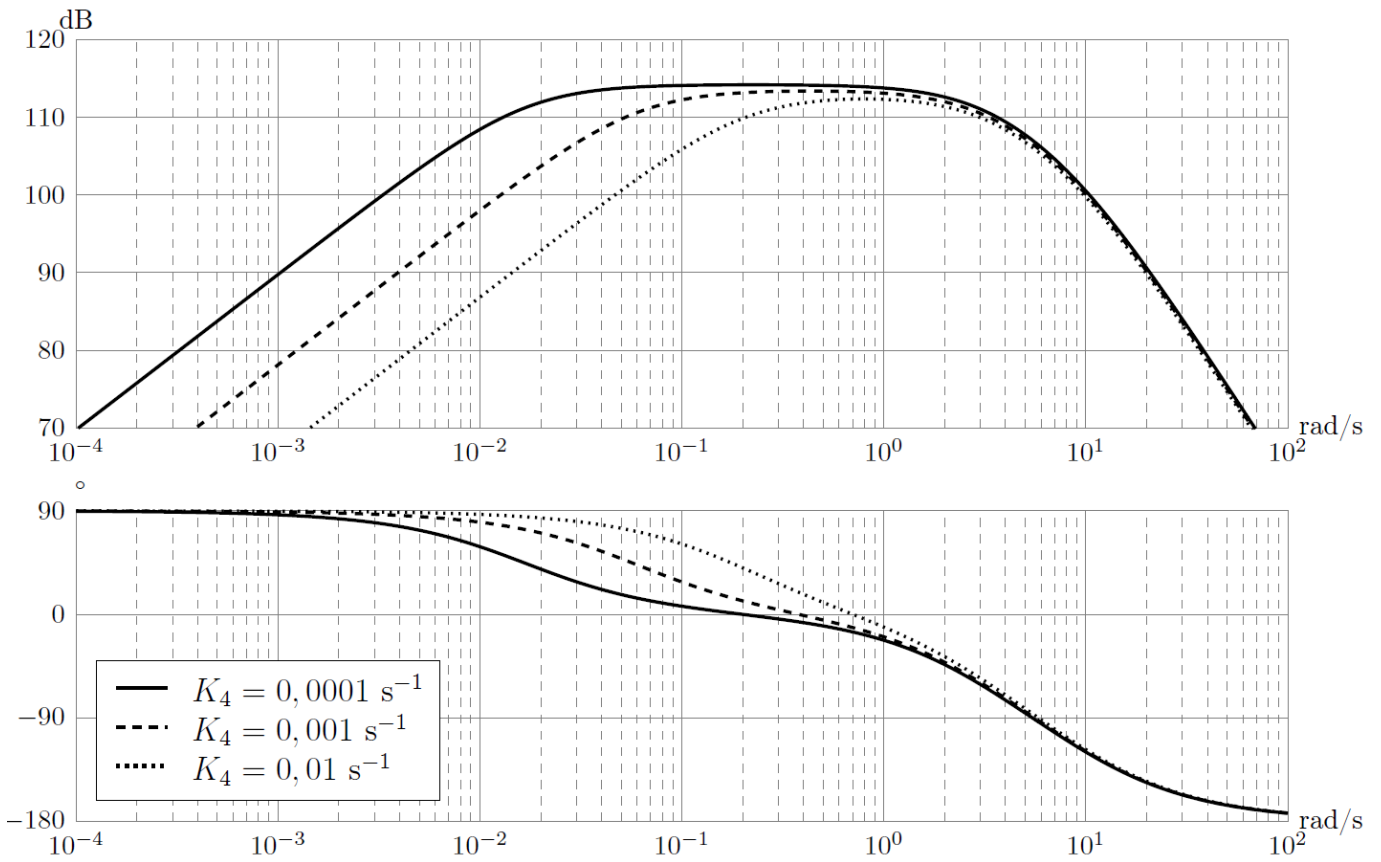


FIGURE B - Diagramme de Bode de l'asservissement en tension complet  $\frac{U(p)}{\gamma_{x2}(p)}$

Q18

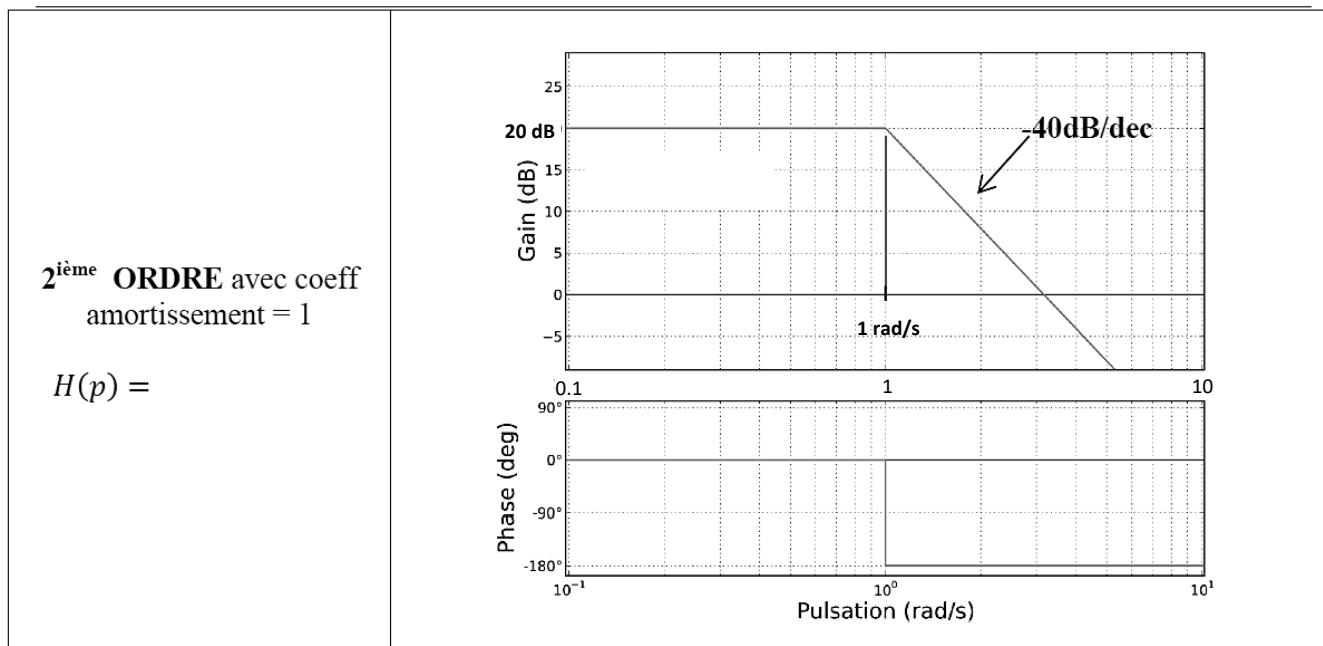
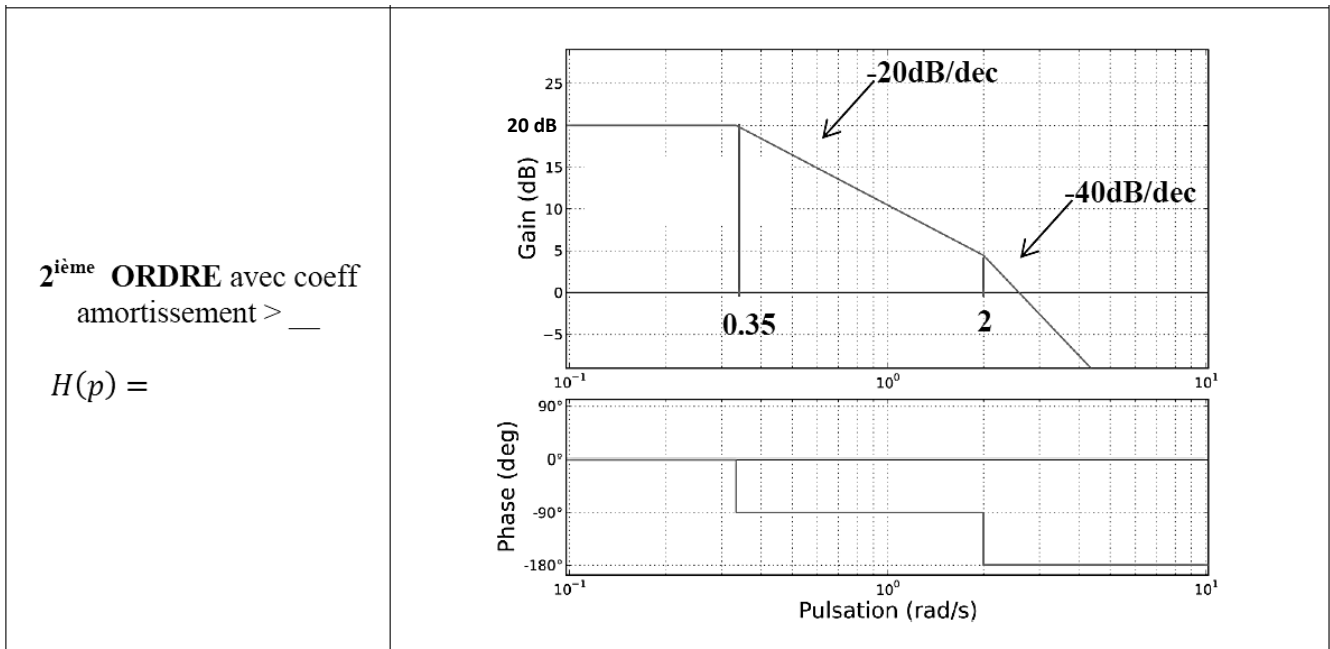
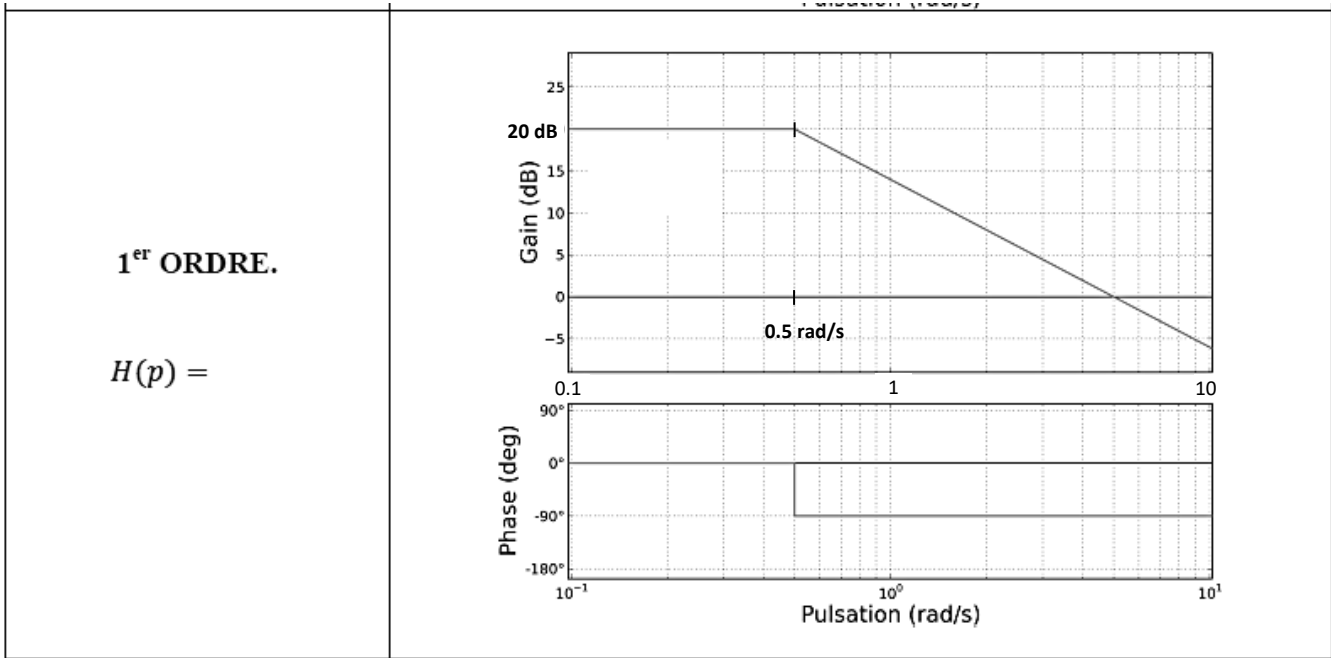
$$P = \begin{pmatrix} \cos \alpha_0 \sin \beta_u & \dots & \dots \\ \cos \alpha_0 \sin \beta_v & \dots & \dots \\ \cos \alpha_0 \sin \beta_w & \dots & \dots \end{pmatrix}$$

Q19 :

$$P = \begin{pmatrix} \dots & \dots & \dots \\ \dots & \dots & \dots \\ \dots & \dots & \dots \end{pmatrix}$$

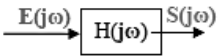
**Exercice**

Fonction de transfert	Diagrammes asymptotiques ou réels de bode
<p style="text-align: center;"><b>INTEGRATEUR</b></p> <p style="text-align: center;"><math>H(p) =</math></p>	
<p style="text-align: center;"><b>DERIVATEUR PUR</b></p> <p style="text-align: center;"><math>H(p) =</math></p>	
<p style="text-align: center;"><b>DERIVATEUR</b></p> <p style="text-align: center;"><math>H(p) =</math></p>	



**Diagramme de Bode et réponse temporelle**

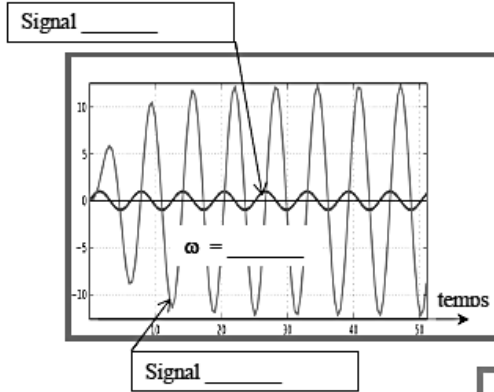
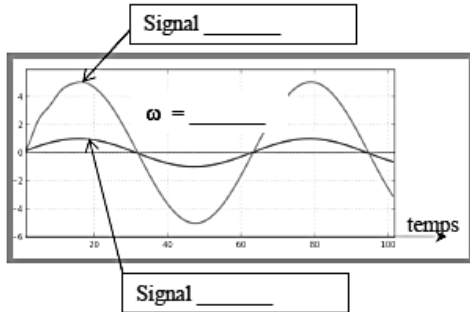
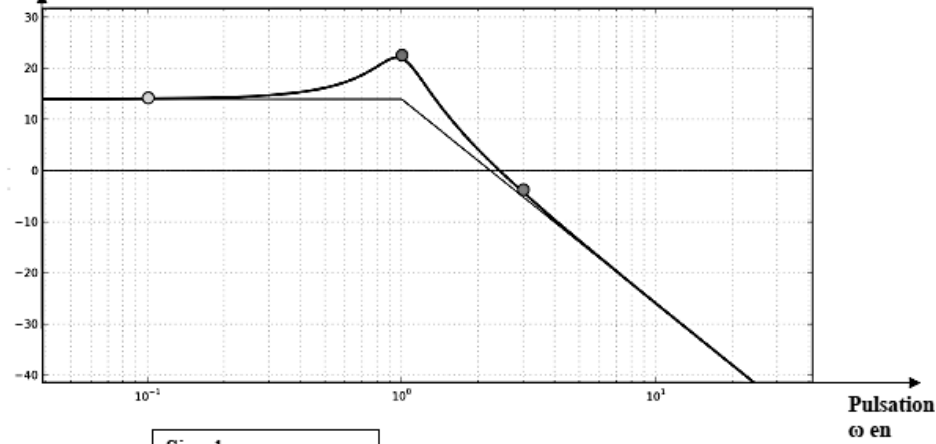
Fonction de transfert étudiée



Dans cet exemple :

$$H(p) = \frac{5}{1 + 0.4p + p^2}$$

Gain A en dB  
 $= 20 \log(|H(j\omega)|)$



Phase  $\phi$  en degrés  
 $= \arg(H(j\omega))$

