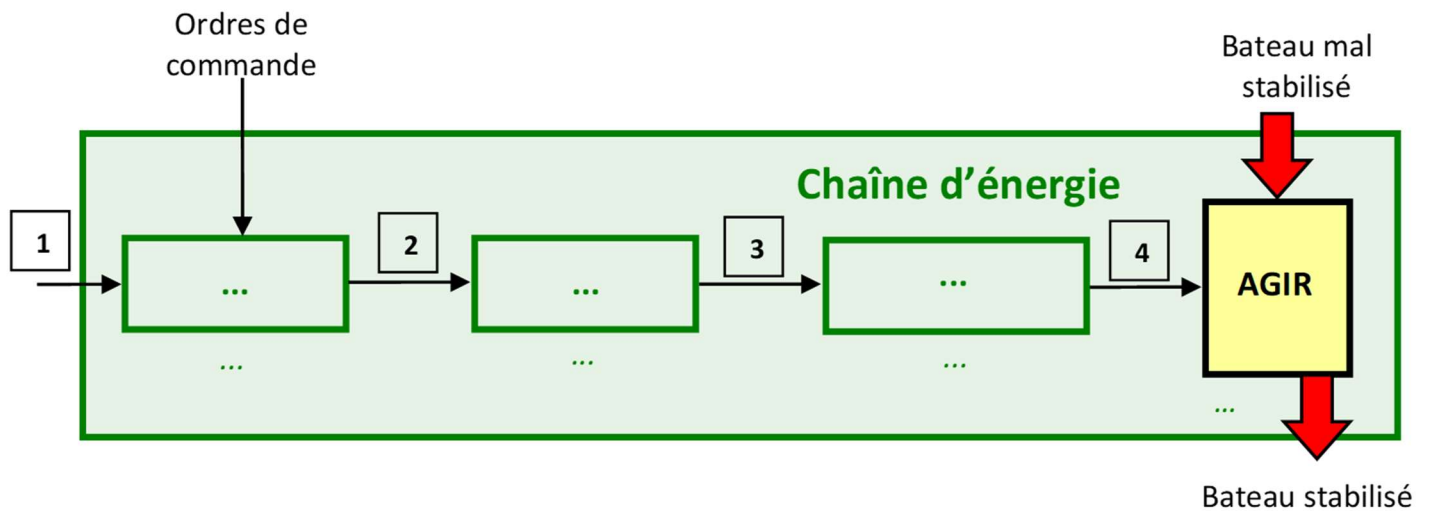


DOCUMENT RÉPONSES

<u>Nom</u> :	<u>Note</u> :
<u>Prénom</u> :	
<u>Observations</u> :	

Q1.



Flux :

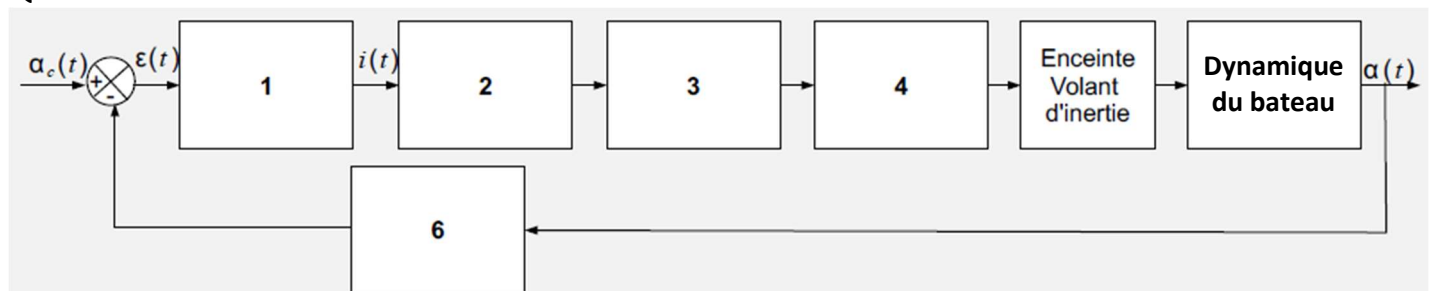
1 : _____

2 : _____

3 : _____

4 : _____

Q2.



Repères	Constituants du schéma-blocs
1	
2	
3	

Repères	Constituants du schéma-blocs
4	
5	Dynamique du bateau
6	

4a

3a

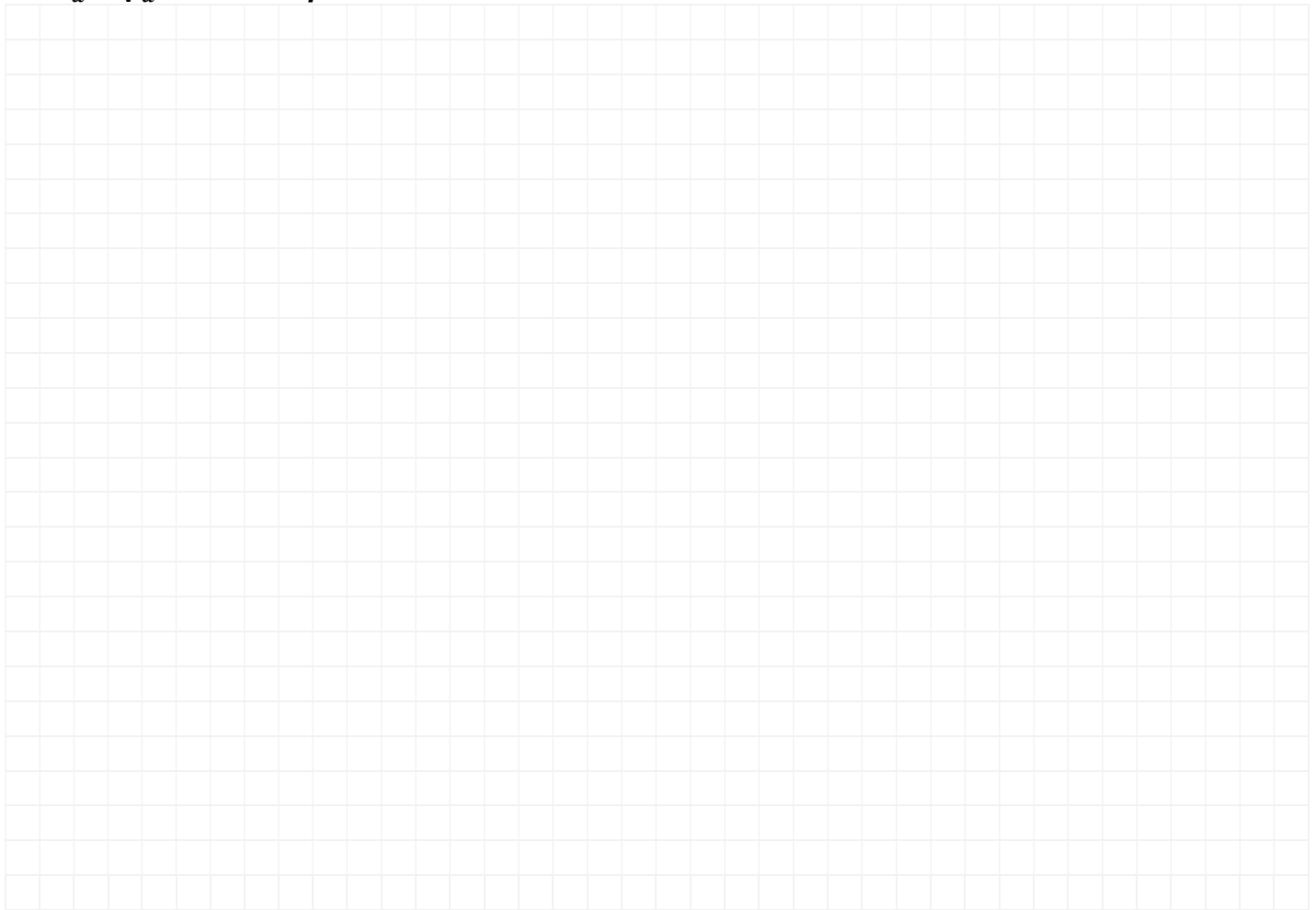
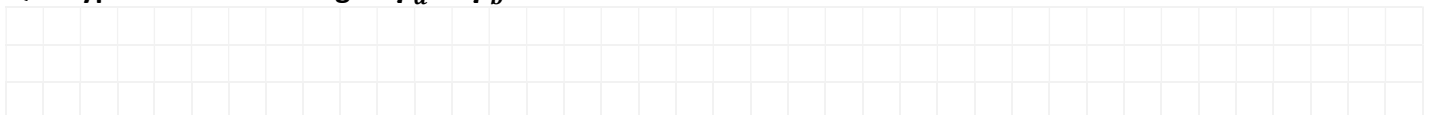
2



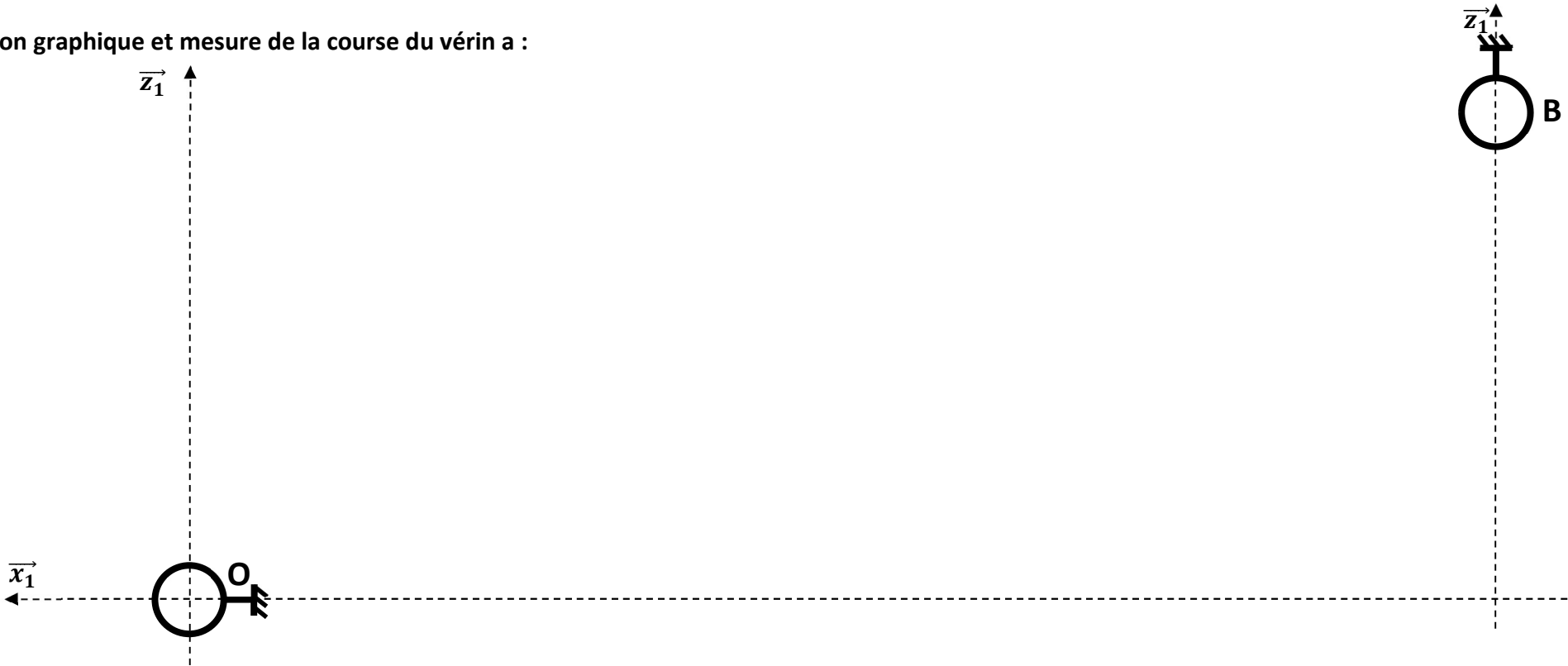
4b

3b

The diagram illustrates a mechanical system. A vertical guide, labeled 1, has two fixed supports at points B and D. A curved arm, labeled 2, is pivoted at point O. The arm consists of two segments: segment A is at an angle β to the vertical $\vec{z}_1$ axis, and segment C is perpendicular to segment A. A horizontal guide, labeled 1, passes through point O and is fixed at its ends. A horizontal bar, labeled 1, is attached to the vertical guide and the horizontal guide, with its ends at B and D. A coordinate system is defined with $\vec{z}_1$ as the vertical axis, $\vec{x}_1$ as the horizontal axis pointing left, and $\vec{z}_2$ as the axis along segment A. Other axes shown are $\vec{x}_{3a}$ and $\vec{x}_{3b}$, which are parallel to $\vec{x}_1$ and $\vec{x}_2$ respectively.

Q5. Figures géométrales :**Q6. λ_a et γ_a en fonction β :****Q7. Course du vérin a :****Q8. Hypothèse sur les angles γ_a et γ_b :**

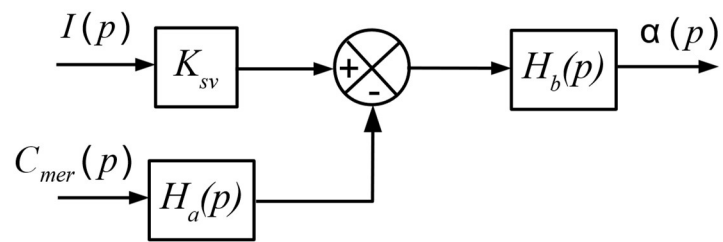
Q9. Construction graphique et mesure de la course du vérin a :



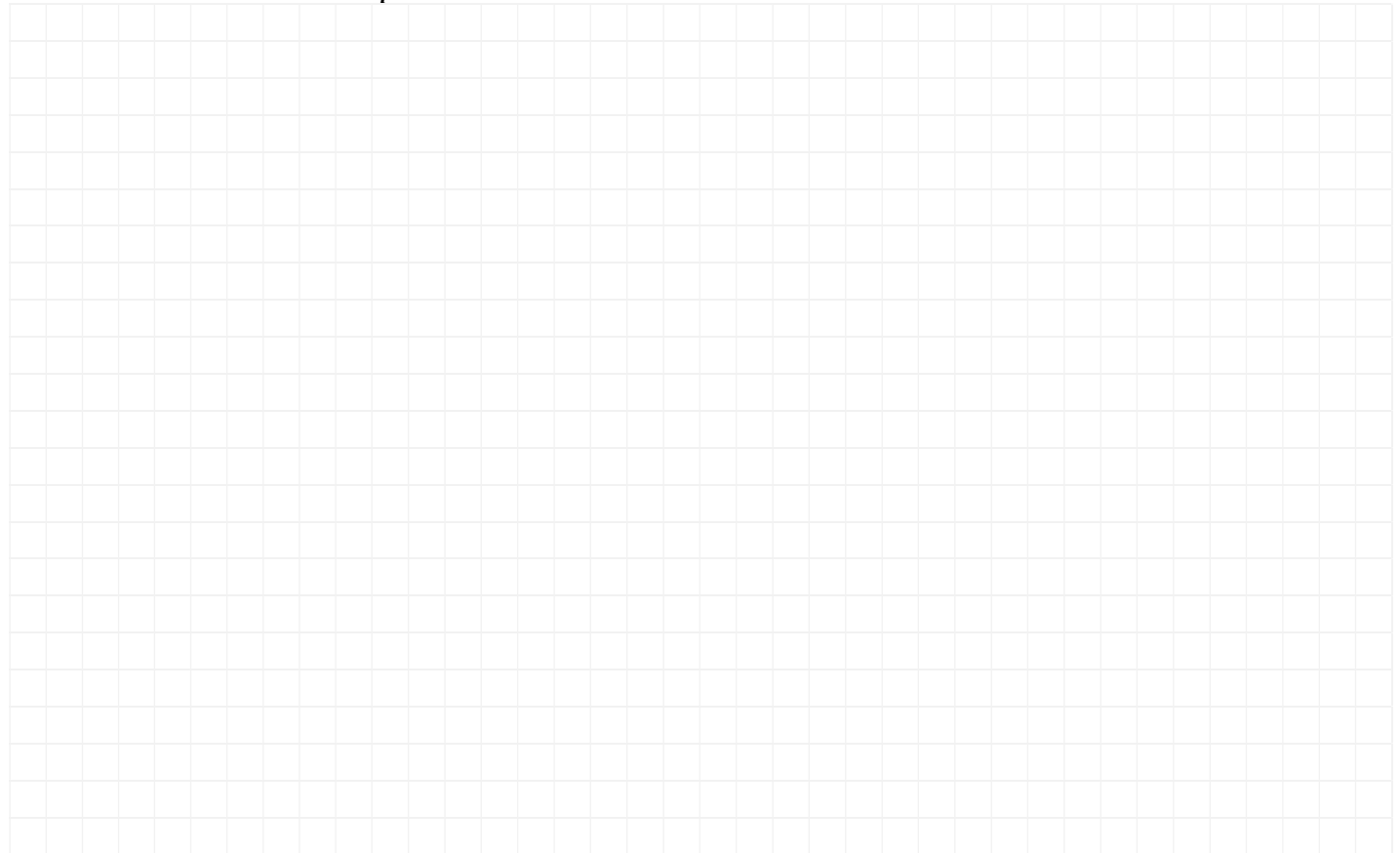
Echelle 1/3



$H_1(p) =$	$H_4(p) =$
$H_2(p) =$	$H_5(p) =$
$H_3(p) =$	$H_6(p) =$

Q11. Équivalence des schémas-blocs :**H_a(p) =****H_b(p) =**

Q12. & Q13. Expression de $H_p(p)$:



$K_1 =$

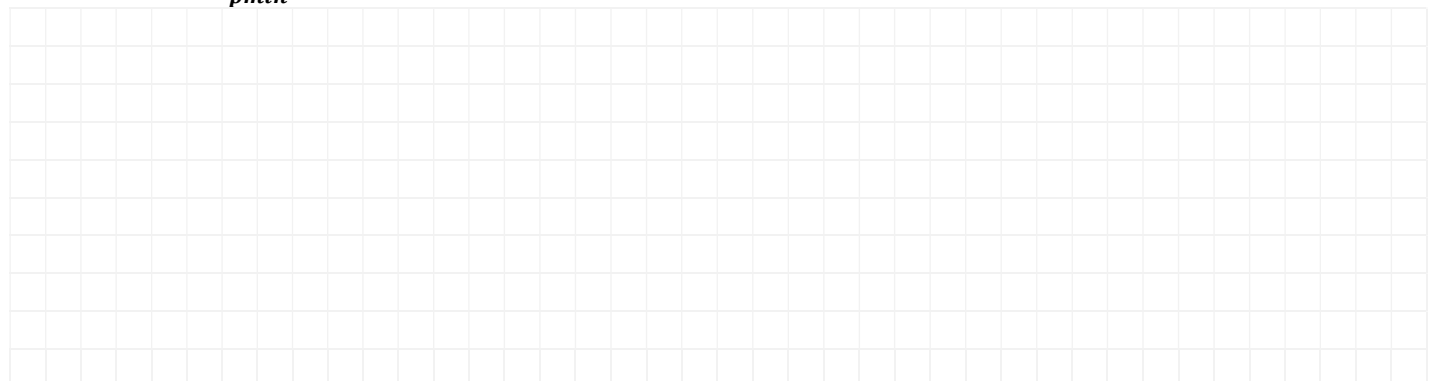
$\xi =$

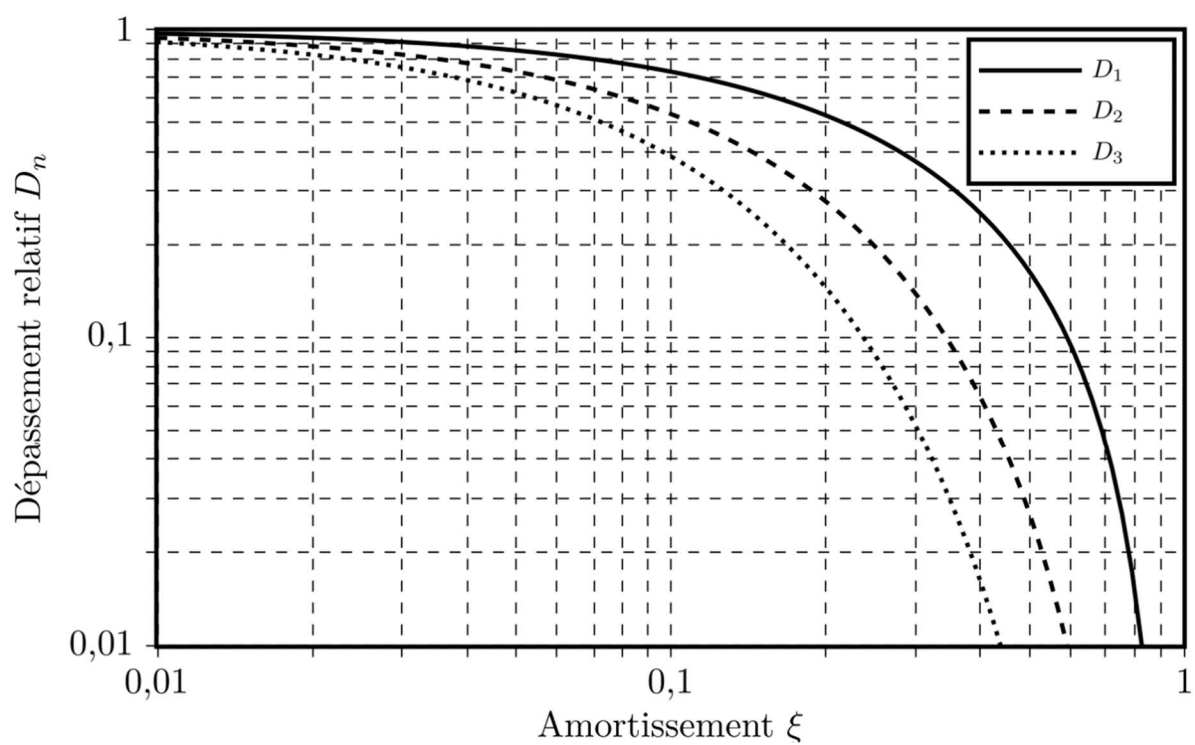
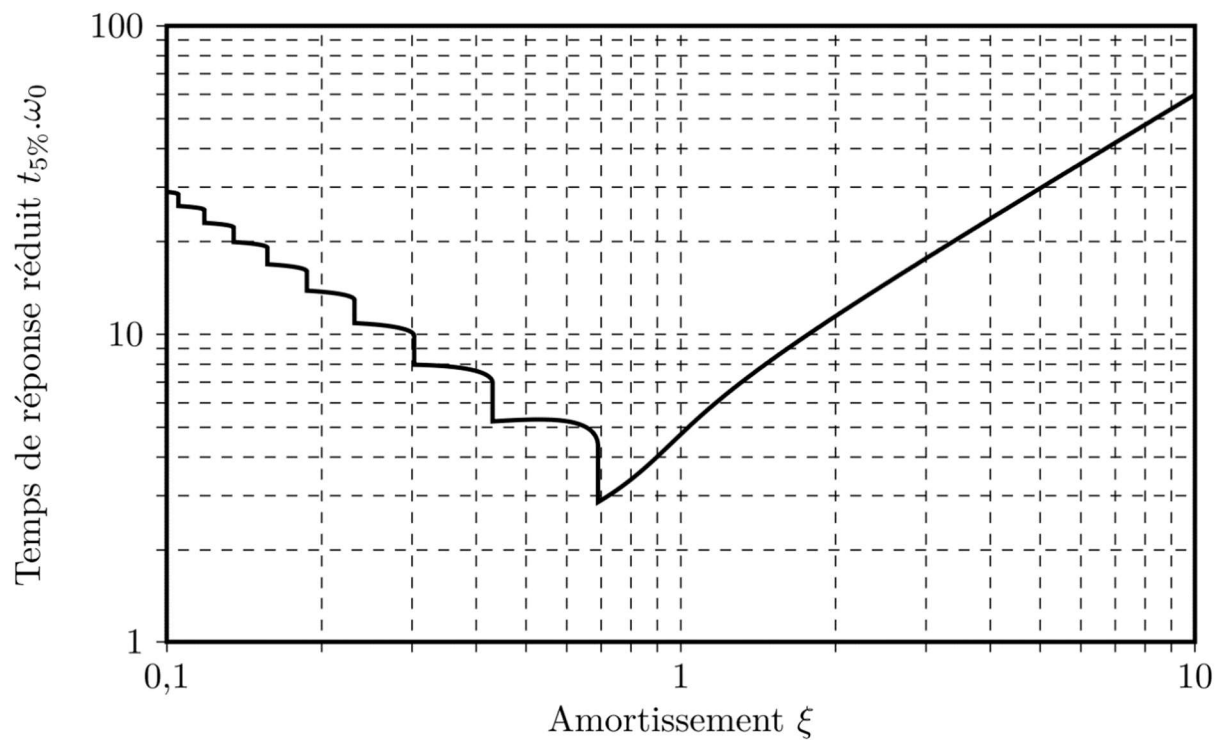
$\omega_0 =$

Q14. Expression de l'erreur statique en poursuite :



Q15. Calcul de K_{pmin} :



Abaques d'identification d'un système du second ordre :

Q16. Calcul de l'amortissement et de la pulsation propre :

$\xi =$	$\omega_0 =$
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$$D_{1\%} =$$
 $\omega_0 =$

Q21. Calcul de ω_{mer} , du facteur d'atténuation et conclusion :

