

# Home Work #4

Ali BaniAsad 96108378

November 11, 2021

## 1 Question 1

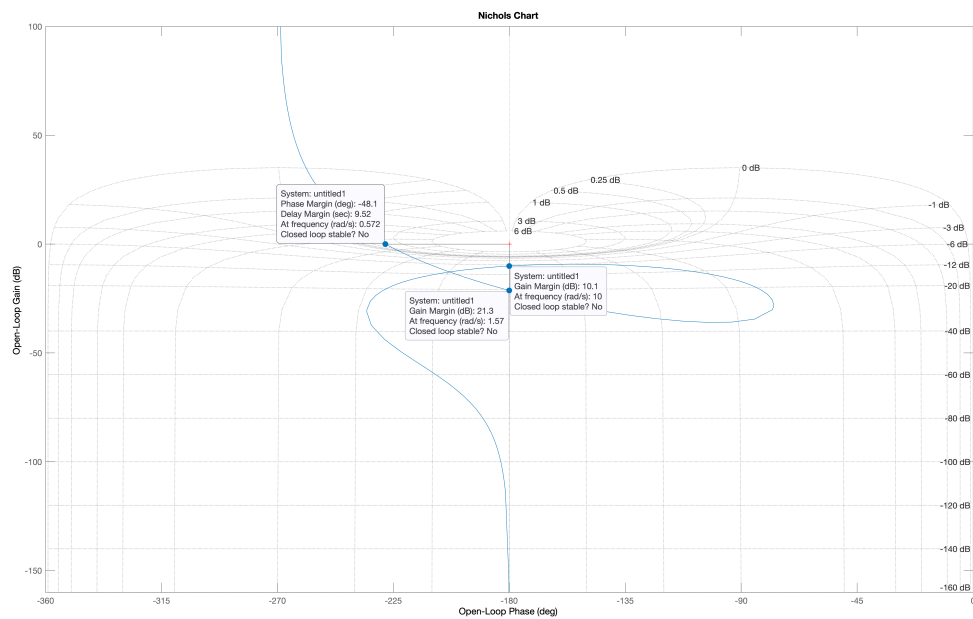
System:

$$G(s) = \frac{(s+1)(s+4)(s+8)}{s^3(s^2+0.2s+100)}$$

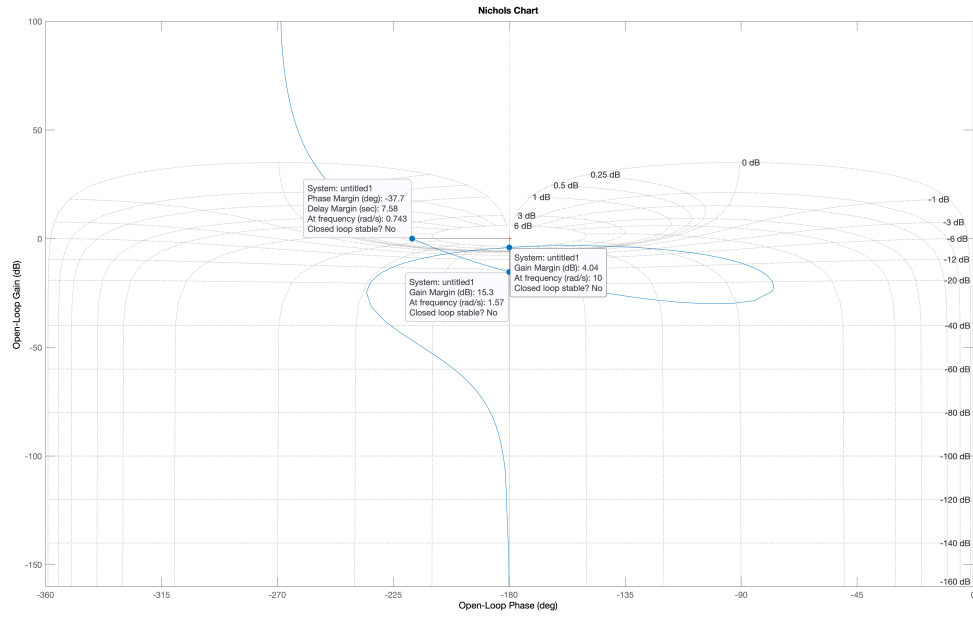
### 1.1 part a

- $K = 0.5$

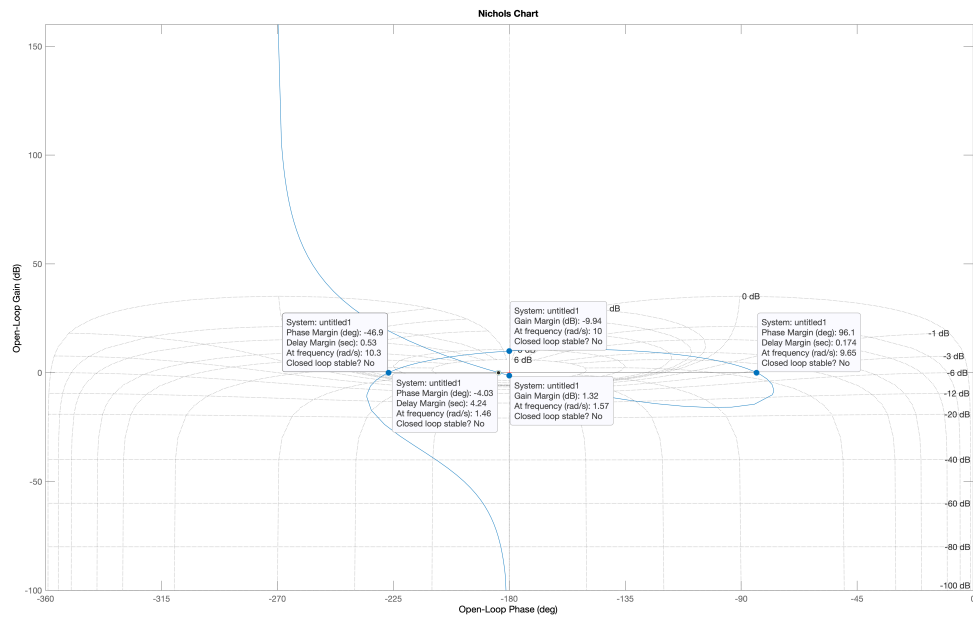
Figure 1: Nichols chart for  $KG$ , ( $K = 0.5$ )



- $K = 1$

Figure 2: Nichols chart for  $KG, (K = 1)$ 

- $K = 5$

Figure 3: Nichols chart for  $KG, (K = 5)$ 

## Contents

<b>1</b>	<b>Question 1</b>	<b>1</b>
1.1	part a . . . . .	1

**List of Figures**

1	Nichols chart for $KG, (K = 0.5)$ . . . . .	1
2	Nichols chart for $KG, (K = 1)$ . . . . .	2
3	Nichols chart for $KG, (K = 5)$ . . . . .	2

## List of Tables