

自控作業 2 E14056499 林俊佑

Code:

```
clear all,close all,clc
k= 3
Cs=zpk([], [1],k)
Cg=zpk([], [-2],1)
CsCg=series(Cs,Cg)

sys=feedback(CsCg,1,-1)
pole=pole(sys)

t = 0:0.01:4
input = exp(t)
figure(2)
lsim(sys,input,t)
```

Output:

k = 3

Cs =

$$\begin{array}{c} 3 \\ \hline (s-1) \end{array}$$

Continuous-time zero/pole/gain model.

Cg =

$$\begin{array}{c} 1 \\ \hline (s+2) \end{array}$$

Continuous-time zero/pole/gain model.

CsCg =

$$\frac{3}{(s+2)(s-1)}$$

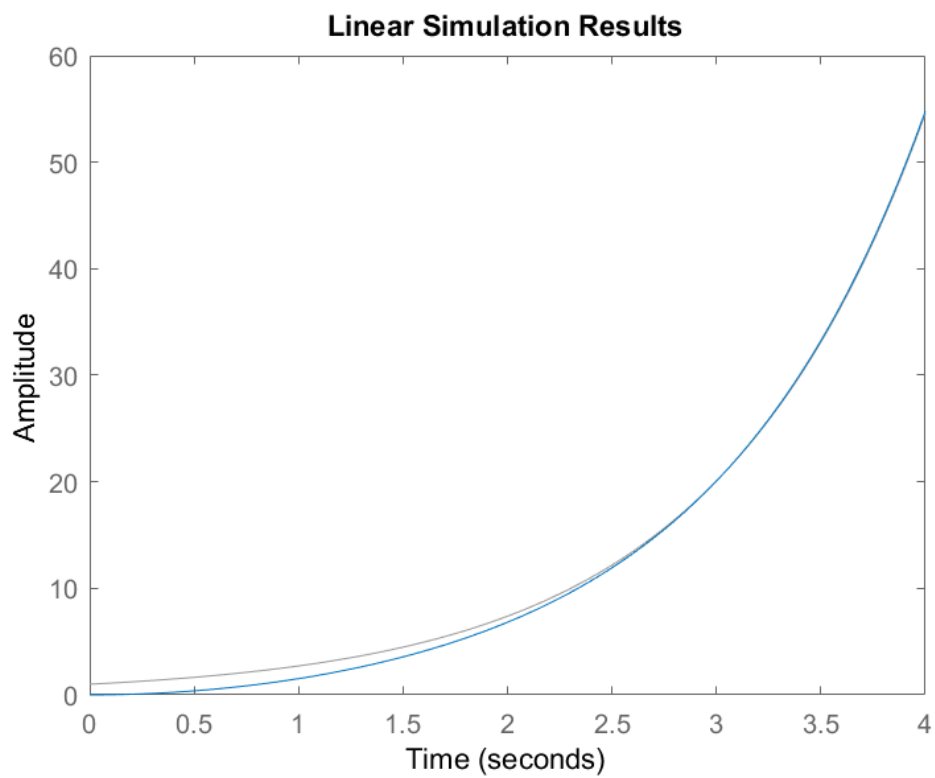
Continuous-time zero/pole/gain model.
sys =

$$\frac{3}{(s^2 + s + 1)}$$

Continuous-time zero/pole/gain model.
pole = 2×1 complex
-0.5000 + 0.8660i
-0.5000 - 0.8660i

Ans:

(a)



(b) $t_s = 2.5s$