

---

# Dan Otieno.

## Table of Contents

CPE 381-01. ....	1
Homework 3 - Q2. ....	1
02/18/2023. ....	1

## CPE 381-01.

## Homework 3 - Q2.

**02/18/2023.**

```
syms t x1 x2
x1=4*exp(-2*t)*cos(8*t)*heaviside(t);
x2=4*exp(-4*t)*cos(8*t)*heaviside(t);

% X1 = (5*(s + 2))/((s + 2)^2 + 64)
% X1 = (5*s+10)/(s^2+4*s+68)
X1=laplace(x1)
splane([5 10],[1 4 68])

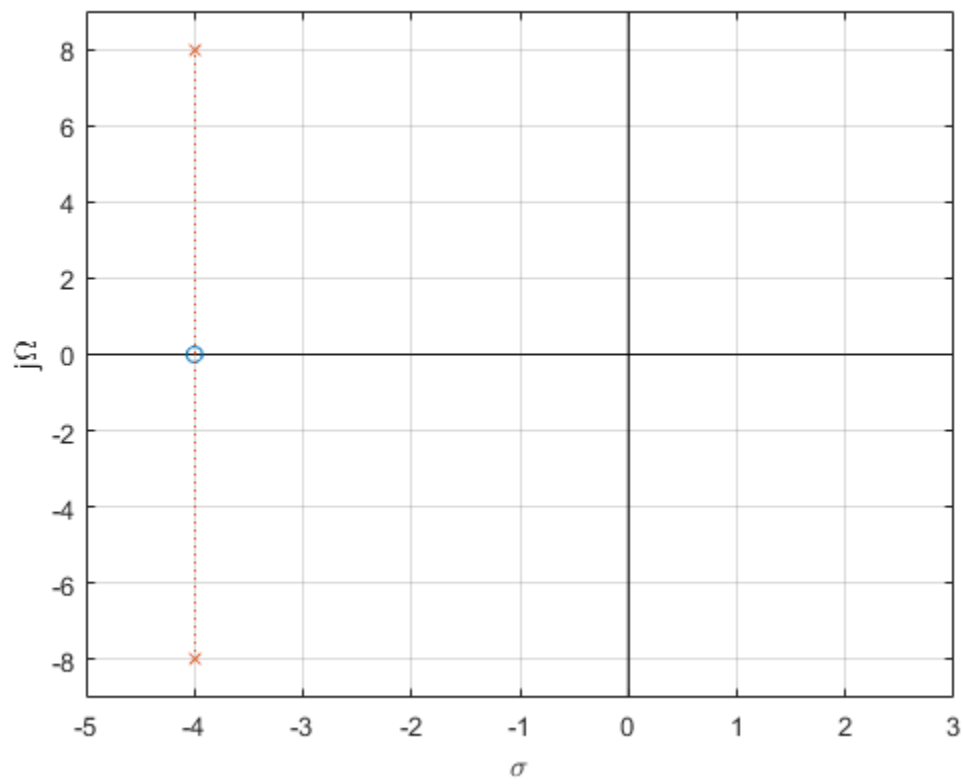
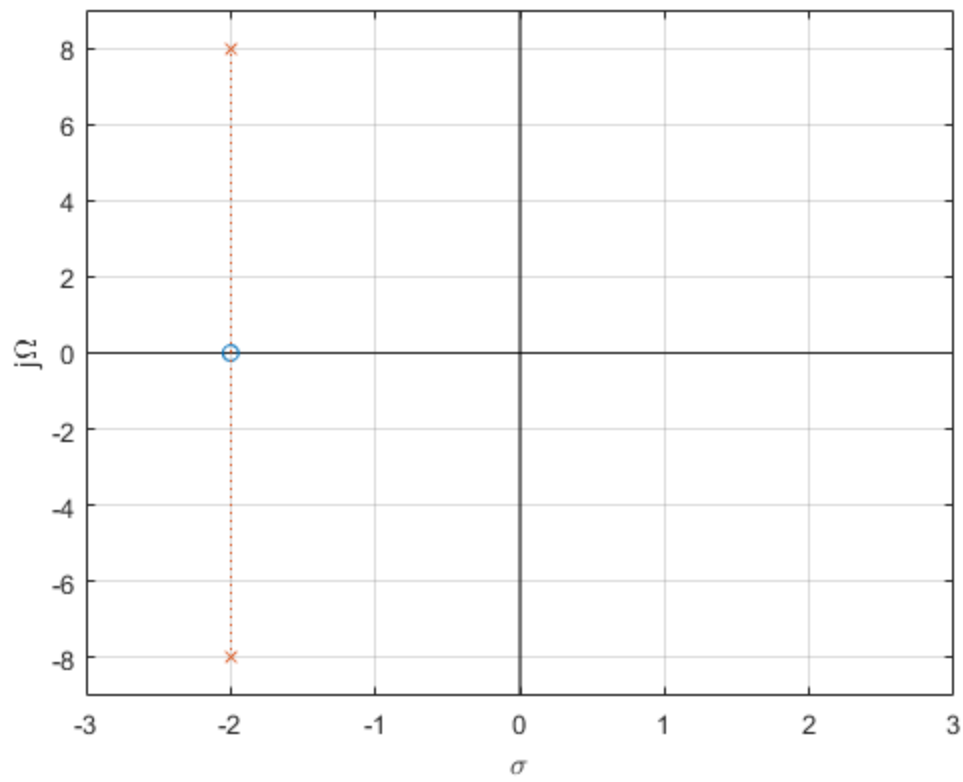
% X2 = (5*(s + 4))/((s + 4)^2 + 64)
% X2 = (5*s+20)/(s^2+8*s+80)
X2=laplace(x2)
figure
splane([5 20],[1 8 80])
```

$X1 =$

$$(4*(s + 2))/((s + 2)^2 + 64)$$

$X2 =$

$$(4*(s + 4))/((s + 4)^2 + 64)$$



*Published with MATLAB® R2022a*