

---

```
clc
clear
close all
```

```
G1 = tf([143 2.6 26 0 0], [12 0.1 1])
G2 = tf([1 -0.1 -1], [-143 -2.6 -26 0 0])
p1 = pole(G1)
z1 = zero(G1)
p2 = pole(G2)
z2 = zero(G2)
```

*G1 =*

$$\frac{143 s^4 + 2.6 s^3 + 26 s^2}{12 s^2 + 0.1 s + 1}$$

*Continuous-time transfer function.*

*G2 =*

$$\frac{-s^2 + 0.1 s + 1}{143 s^4 + 2.6 s^3 + 26 s^2}$$

*Continuous-time transfer function.*

*p1 =*

```
-0.0042 + 0.2886i
-0.0042 - 0.2886i
```

*z1 =*

```
0.0000 + 0.0000i
0.0000 + 0.0000i
-0.0091 + 0.4263i
-0.0091 - 0.4263i
```

*p2 =*

```
0.0000 + 0.0000i
0.0000 + 0.0000i
-0.0091 + 0.4263i
-0.0091 - 0.4263i
```

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$z_2 =$

$-0.9512$   
 $1.0512$

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