

```
GH = tf(1, [1, 2, 5, 6])
```

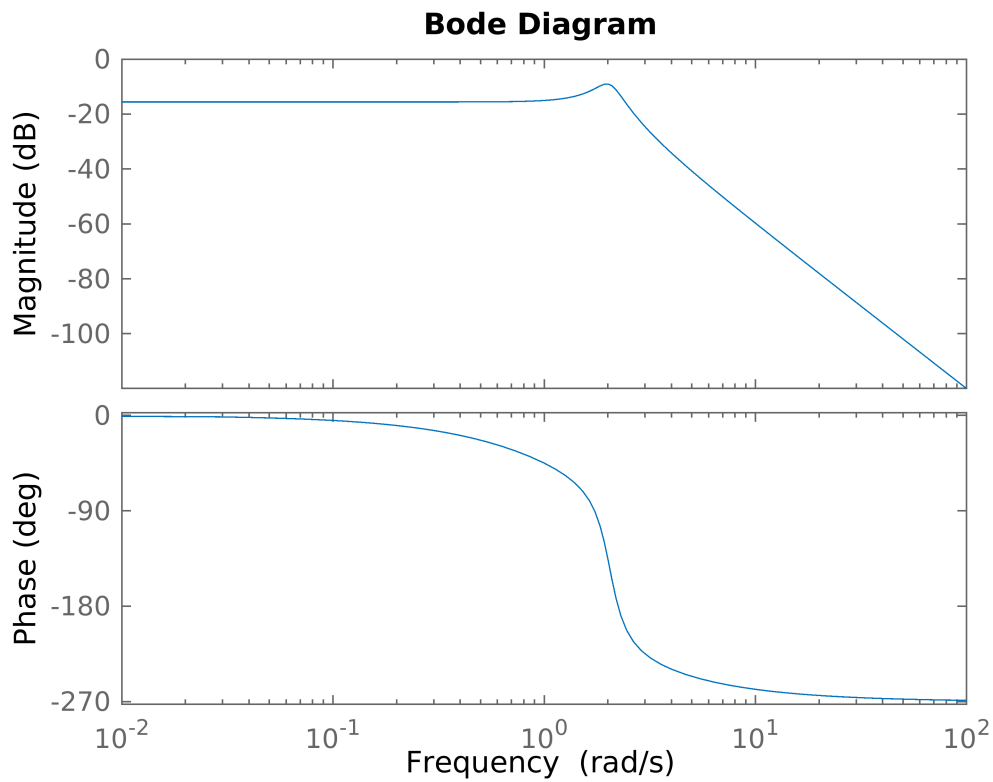
```
GH =
```

$$\frac{1}{s^3 + 2s^2 + 5s + 6}$$

Continuous-time transfer function.

```
bode(GH)
```

Warning: MATLAB has disabled some advanced graphics rendering features by switching to software OpenGL. For more information, click here.



```
CL = feedback(GH, 1)
```

```
CL =
```

$$\frac{1}{s^3 + 2s^2 + 5s + 7}$$

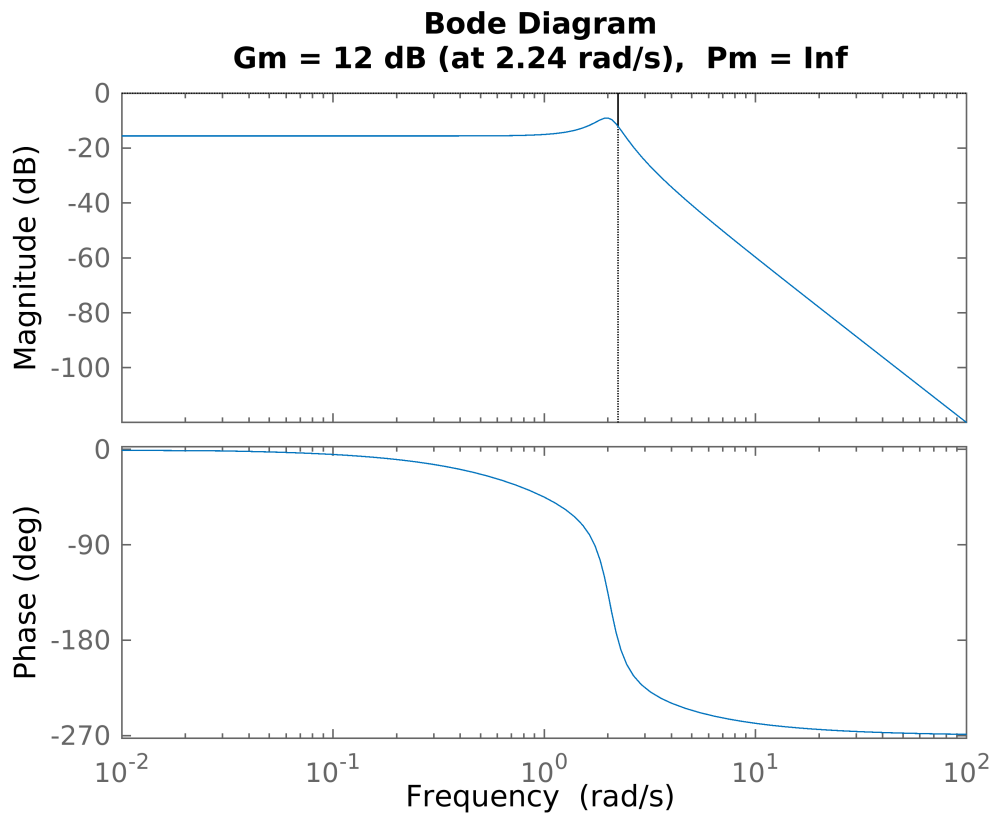
Continuous-time transfer function.

```
pole(CL)
```

```
ans = 3x1 complex  
-0.1981 + 2.0797i
```

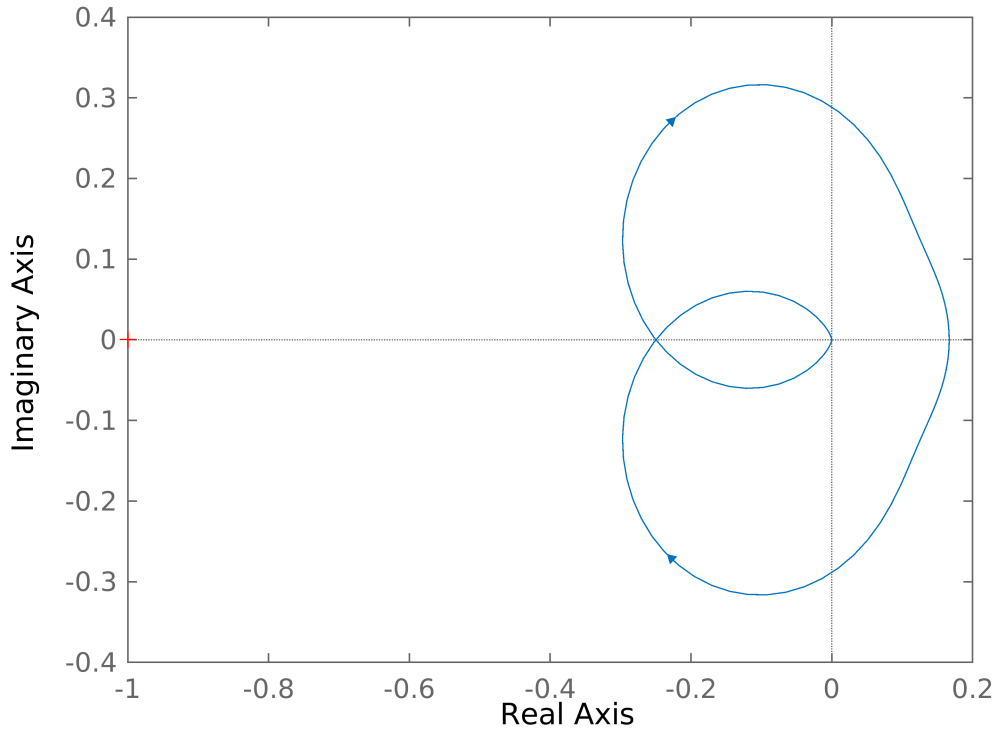
-0.1981 - 2.0797i
-1.6038 + 0.0000i

```
margin(GH)
```



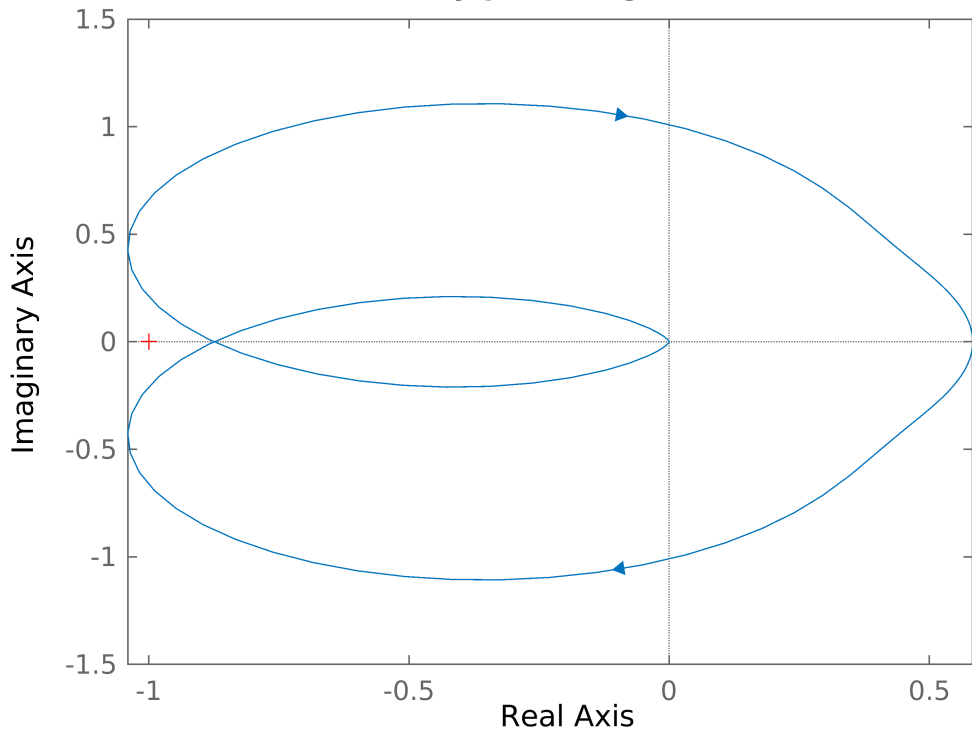
```
nyquist(GH)
```

Nyquist Diagram

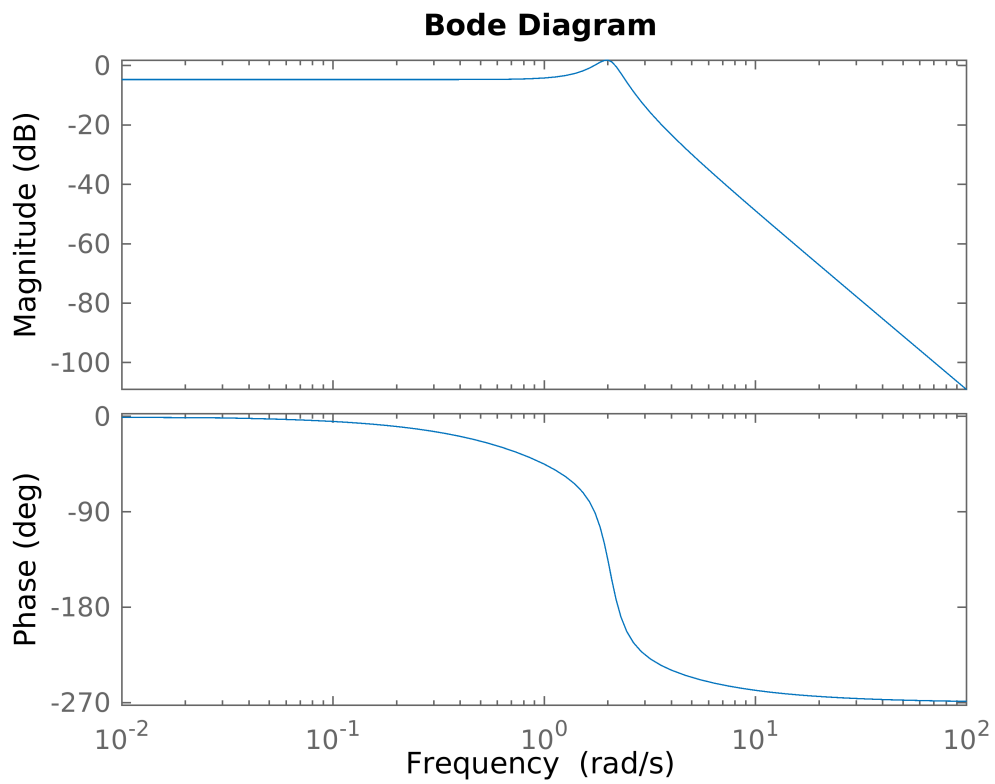


```
nyquist(3.5 * GH)
```

Nyquist Diagram

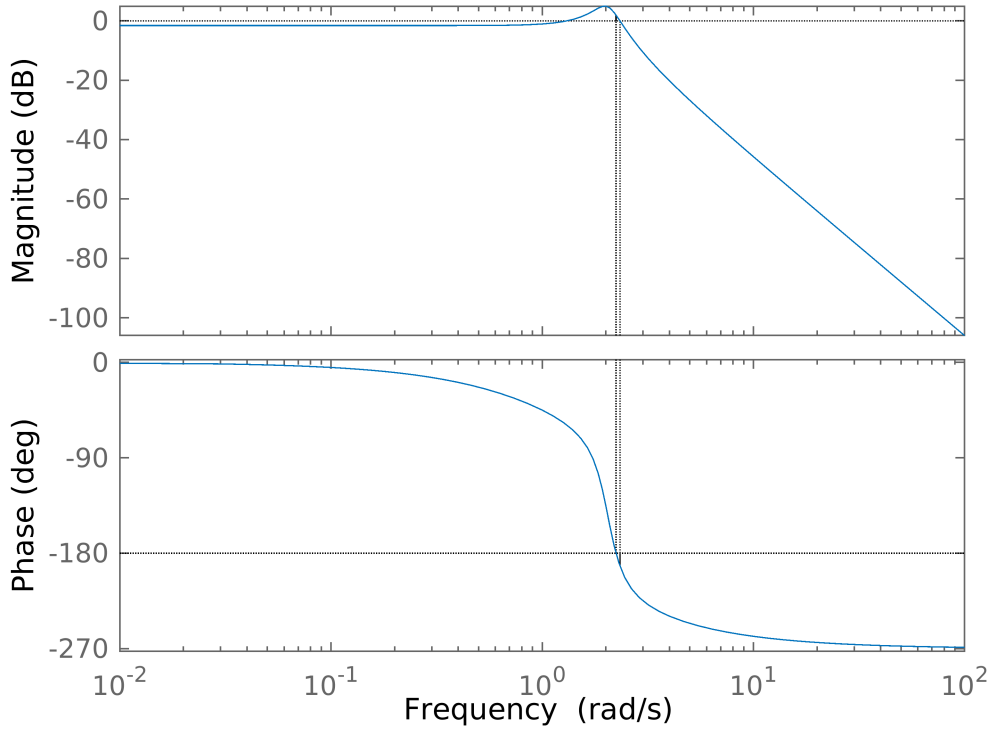


```
bode(3.5 * GH)
```



```
margin(5 * GH)
```

Bode Diagram
Gm = -1.94 dB (at 2.24 rad/s), Pm = -12 deg (at 2.33 rad/s)



```
nyquist(5 * GH)
```

Nyquist Diagram

