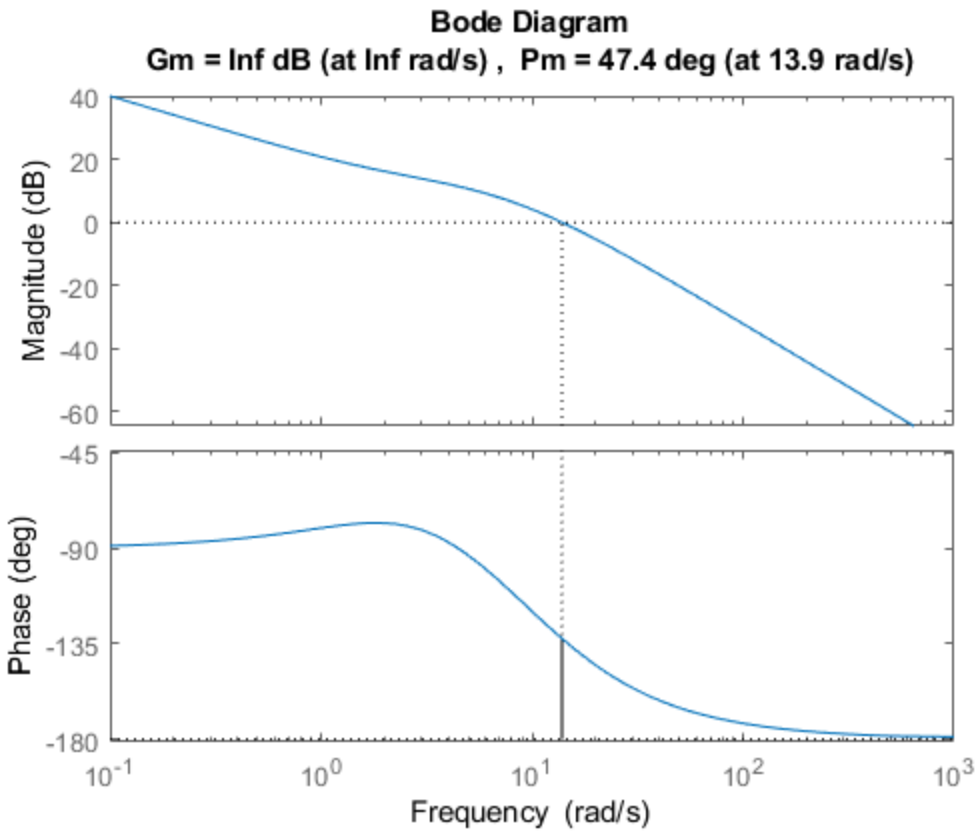
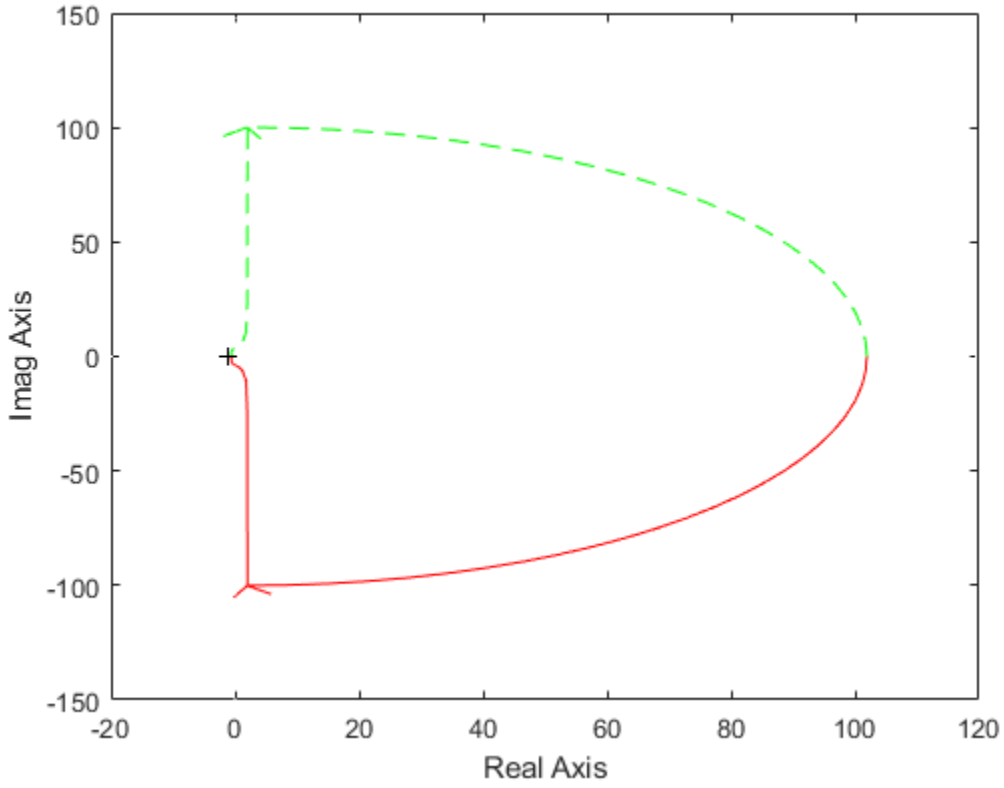
```
s = tf('s');
G = (100*(0.5*s+1))/(s*(0.2*s+1)*(s+10))
figure
margin(G)
figure
step(G/(1+G))
[Gm,Pm,Wcg,Wcp] = margin(G)
nyquist1(G)
```

```
G =

        50 s + 100
  ----------------------
  0.2 s^3 + 3 s^2 + 10 s

Continuous-time transfer function.


Gm =

   Inf


Pm =

   47.3637


Wcg =

   Inf


Wcp =

   13.8869
```


Bode Diagram
Gm = Inf dB (at Inf rad/s) , Pm = 47.4 deg (at 13.9 rad/s)
Magnitude (dB)
40
20
0
-20
-40
-60
Phase (deg)
-45
-90
-135
-180
10^{-1}
10^{0}
10^{1}
10^{2}
10^{3}
Frequency (rad/s)


Imag Axis
150
100
50
0
-50
-100
-150
-20
0
20
40
60
80
100
120
Real Axis

Published with MATLAB® R2021a