```
% Bode, Nyquist and Root Locus
sys = tf([-2 -1],[1 5 3])
figure(1)
pzmap(sys)
grid
figure(2)
margin(sys)
[Gm,Pm,Wcg,Wcp] = margin(sys)
grid
figure(3)
nyquist(sys)
grid
figure(4)
rlocus(sys)
grid
figure(5)
step(sys)
grid
stepinfo(sys)
```

```
sys =

    -2 s - 1
  -------------
  s^2 + 5 s + 3

Continuous-time transfer function.


Gm =

    2.5000


Pm =

   Inf


Wcg =

    0.7071


Wcp =

   NaN


ans =
```

```
struct with fields:

      RiseTime: 0.2360
  SettlingTime: 4.5302
   SettlingMin: -0.4075
   SettlingMax: -0.3022
     Overshoot: 22.2557
    Undershoot: 0
          Peak: 0.4075
      PeakTime: 0.8134
```