

`bodas` is used to draw the asymptotic Bode plots (magnitude and phase) of a system with the following form:

$$G(s) = K \frac{(s + z_1)(s + z_2) \dots (s + z_m)}{(s + p_1)(s + p_2) \dots (s + p_n)}$$

For example, we want draw the asymptotic Bode plots of the following system:

$$G(s) = -100 \frac{s}{s^2 + 12s^2 + 21s + 10}$$

First, we modify  $G(s)$  as follows:

$$G(s) = -100 \frac{(s + 0)}{(s + 1)(s + 1)(s + 10)}$$

Next, we collect  $z$ ,  $p$ , and  $K$ , as follows:

```
z = [0];  
p = [1 1 10];  
K = -100;
```

To draw the asymptotic Bode plot, we simply use:

```
bodas(z, p, K);
```

The result is as follows:

