

```
w = tf([2352, 1176],[1,21,146,336])
```

```
w =
```

$$\frac{2352 s + 1176}{s^3 + 21 s^2 + 146 s + 336}$$

Continuous-time transfer function.

```
zpk(w)
```

```
ans =
```

$$\frac{2352 (s+0.5)}{(s+8) (s+7) (s+6)}$$

Continuous-time zero/pole/gain model.

```
ss(w)
```

```
ans =
```

$$A = \begin{array}{c|ccc} & x1 & x2 & x3 \\ \hline x1 & -21 & -9.125 & -5.25 \\ x2 & 16 & 0 & 0 \\ x3 & 0 & 4 & 0 \end{array}$$

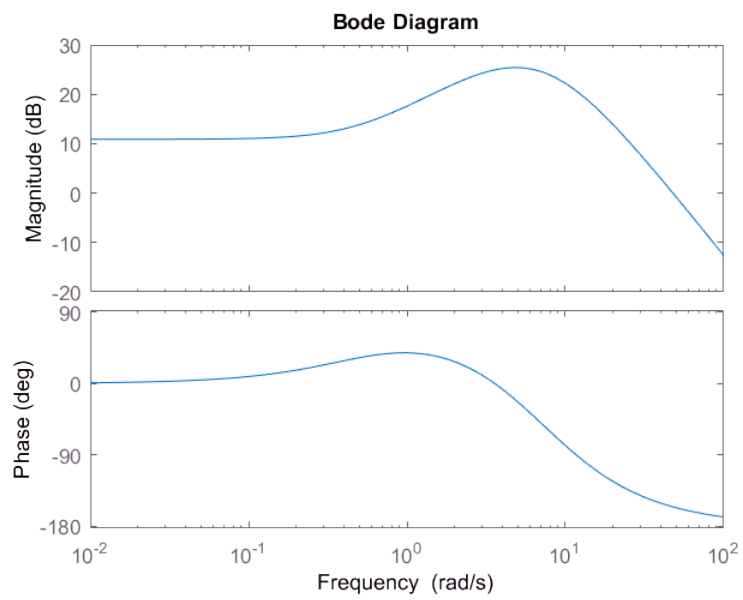
$$B = \begin{array}{c|c} & u1 \\ \hline x1 & 16 \\ x2 & 0 \\ x3 & 0 \end{array}$$

$$C = \begin{array}{c|ccc} & x1 & x2 & x3 \\ \hline y1 & 0 & 9.188 & 1.148 \end{array}$$

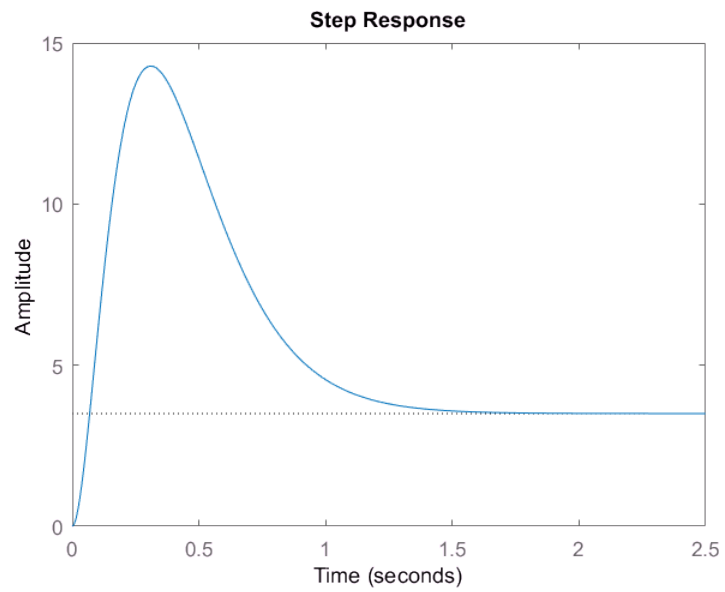
$$D = \begin{array}{c|c} & u1 \\ \hline y1 & 0 \end{array}$$

Continuous-time state-space model.

```
bode(w)
```



`step(w)`



`impulse(w)`

