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# Plant TF for IC Project

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## Setup

```
T1_num = [3.9946];
T1_den = [1 0.068 0 0];
T2_num = [-5*9.8];
T2_den = [7 0 0];
T3_num = [5.43];
T3_den = [1];
T1 = tf(T1_num, T1_den);
T2 = tf(T2_num, T2_den);
T3 = tf(T3_num, T3_den);
pole(T1);
pole(T2);
pole(T3);
z_gc1 = 1;
p_gc1 = 1;
z_gc2 = 1;
p_gc2 = 1;
K_gc1 = 1;
K_gc2 = 1;
```

## Matching T1 Poles to Gc1 Zero

```
z_gc1 = pole(T1);
z_gc1 = z_gc1(3);
```

## Removing one pole at 0 on T2

```
save plantTfs.mat
```

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