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```
clear; clc;
```

## Constraints

---

```
alpha2 = deg2rad(62 - 110);  
alpha3 = deg2rad(39 - 110);  
p21 = 1.903 + 1i*1.374;  
p31 = 1.389 + 1i*1.830;
```

## Free Choices

---

```
beta2 = deg2rad(30);  
beta3 = deg2rad(60);  
gamma2 = deg2rad(-10);  
gamma3 = deg2rad(25);
```

## Vecter Setup and Solution

---

```
A1 = [exp(1i*beta2)-1, exp(1i*alpha2)-1;...  
      exp(1i*beta3)-1, exp(1i*alpha3)-1];  
  
A2 = [exp(1i*gamma2)-1, exp(1i*alpha2)-1;...  
      exp(1i*gamma3)-1, exp(1i*alpha3)-1];  
  
B = [p21; p31];  
  
WZ = A1\B;  
W = WZ(1);  
Z = WZ(2);  
  
US = A2\B;  
U = US(1);  
S = US(2);
```

## Other Plotting Necessities

---

```
V = Z-S;  
G = W+V-U;
```

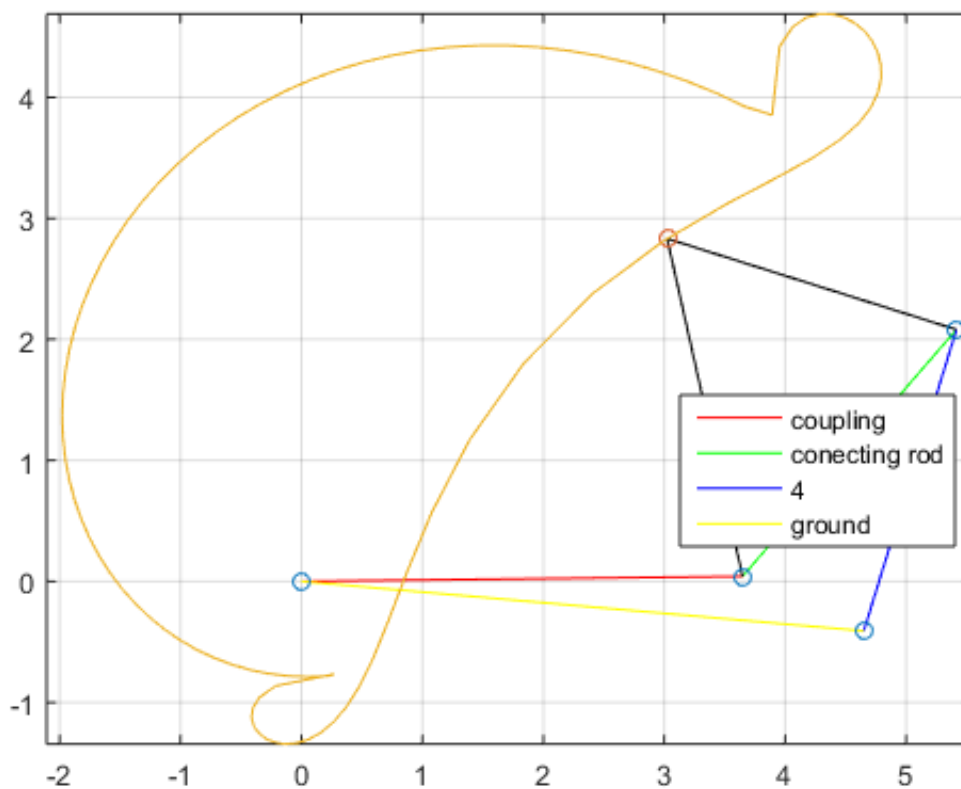
```
ang1 = atan2(imag(G),real(G));
theta = atan2(imag(W),real(W));
%sigma = atan2(imag(U),real(U));
```

## Display Solution

```
disp(['Link 1 has length ' num2str(abs(G))]);
disp(['Link 2 has length ' num2str(abs(W))]);
disp(['Link 3 has length ' num2str(abs(V))]);
disp(['Link 4 has length ' num2str(abs(U))]);
```

```
stuff = four_bar_func([rad2deg(ang1) rad2deg(theta) 10 10], [abs(G) abs(W) abs(V) abs(U)], [1.7 2.3], [1 1]);
```

```
Link 1 has length 4.6679
Link 2 has length 3.6477
Link 3 has length 2.6994
Link 4 has length 2.6058
```



## Animate

```
pp = [W+Z; W+Z+p21; W+Z+p31];

Four_Bar([W Z U S],pp,'play');
```

