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```
clear all; clc;  
E_in = [1;0];
```

### R -> R

```
J_ret0 = J_ret(pi/4, 1.25*pi/2);  
J_ret1 = J_ret(-pi/4, 1.25*pi/2);  
J_poll = J_pol(0);  
E_ut1 = J_poll*J_ret1*J_ret0*E_in  
I_1 = (abs(E_ut1(1)))^2 + (abs(E_ut1(2)))^2
```

*E\_ut1 =*

*-0.3827 + 0.9239i*  
*0.0000 + 0.0000i*

*I\_1 =*

*1.0000*

### R -> L

```
J_ret0 = J_ret(pi/4, 1.25*pi/2);  
J_ret1 = J_ret(pi/4, 1.25*pi/2);  
J_poll = J_pol(0);  
E_ut2 = J_poll*J_ret1*J_ret0*E_in  
I_2 = (abs(E_ut2(1)))^2 + (abs(E_ut2(2)))^2
```

*E\_ut2 =*

*0.1464 - 0.3536i*  
*0.0000 + 0.0000i*

*I\_2 =*

*0.1464*

---

## L -> R

```
J_ret0 = J_ret(-pi/4, 1.25*pi/2);  
J_ret1 = J_ret(-pi/4, 1.25*pi/2);  
J_pol1 = J_pol(0);  
E_ut3 = J_pol1*J_ret1*J_ret0*E_in  
I_3 = (abs(E_ut3(1)))^2 + (abs(E_ut3(2)))^2
```

*E\_ut3* =

*0.1464 - 0.3536i*  
*0.0000 + 0.0000i*

*I\_3* =

*0.1464*

## L -> L

```
J_ret0 = J_ret(-pi/4, 1.25*pi/2);  
J_ret1 = J_ret(pi/4, 1.25*pi/2);  
J_pol1 = J_pol(0);  
E_ut4 = J_pol1*J_ret1*J_ret0*E_in  
I_4 = (abs(E_ut4(1)))^2 + (abs(E_ut4(2)))^2
```

*E\_ut4* =

*-0.3827 + 0.9239i*  
*0.0000 + 0.0000i*

*I\_4* =

*1.0000*

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