```matlab
syms ZL ZR1 ZR2 real
```

```matlab
Ze = 1 / (1 / ZL + 1 / ZR2)
```

Ze =

$$\frac{1}{\dfrac{1}{ZL} + \dfrac{1}{ZR_2}}$$

```matlab
Z = Ze / (Ze + ZR1)
```

Z =

$$\frac{1}{\left(\dfrac{1}{ZL} + \dfrac{1}{ZR_2}\right)\left(ZR_1 + \dfrac{1}{\dfrac{1}{ZL} + \dfrac{1}{ZR_2}}\right)}$$

```matlab
syms R1 R2 L w real
```

```matlab
Z = subs(Z, ZR1, R1)
```

Z =

$$\frac{1}{\left(\dfrac{1}{ZL} + \dfrac{1}{ZR_2}\right)\left(R_1 + \dfrac{1}{\dfrac{1}{ZL} + \dfrac{1}{ZR_2}}\right)}$$

```matlab
Z = subs(Z, ZR2, R2)
```

Z =

$$\frac{1}{\left(\dfrac{1}{R_2} + \dfrac{1}{ZL}\right)\left(R_1 + \dfrac{1}{\dfrac{1}{R_2} + \dfrac{1}{ZL}}\right)}$$

```matlab
Z = subs(Z, ZL, i * w * L)
```

Z =

$$\frac{1}{\left(R_1 + \dfrac{1}{\dfrac{1}{R_2} - \dfrac{i}{Lw}}\right)\left(\dfrac{1}{R_2} - \dfrac{i}{Lw}\right)}$$

```matlab
a = simplify(real(Z))
```

a =

$$\frac{L^2 R_2 w^2 \, (R_1 + R_2)}{L^2 R_1{}^2 w^2 + 2 L^2 R_1 R_2 w^2 + L^2 R_2{}^2 w^2 + R_1{}^2 R_2{}^2}$$

```
b = simplify(imag(Z))
```

b =

$$\frac{L R_1 R_2{}^2 w}{L^2 R_1{}^2 w^2 + 2 L^2 R_1 R_2 w^2 + L^2 R_2{}^2 w^2 + R_1{}^2 R_2{}^2}$$

```
a/b
```

ans =

$$\frac{L w \, (R_1 + R_2)}{R_1 R_2}$$