```
>> [p] = NDD([-0.1 0 0.2 0.3 0.35], [1.81818 2 2.5 2.85714 3.07692])

p =

    1.8182
    1.8182
    2.2727
    3.2467
    4.9968

>> x = -0.4:0.001:0.6;
>> Pn = p(1) + p(2)*(x+0.1) + p(3)*(x+0.1).*(x-0) + p(4)*(x+0.1).*(x-0).*(x-0.2) + p ↙
(5)*(x+0.1).*(x-0).*(x-0.2).*(x-0.3);
>> Fn = 2./(1-x);
>> A = [1,-0.1,0.01,-0.001,0.0001,1.81818;1,0,0,0,0,2;1,0.2,0.04,0.008,0.0016,2.5; ↙
1,0.3,0.09,0.027,0.0081,2.85714;1,0.35,0.1225,0.042875,0.01500625,3.07692];
>> C = rref(A)

C =

    1.0000         0         0         0         0    2.0000
         0    1.0000         0         0         0    2.0105
         0         0    1.0000         0         0    1.9980
         0         0         0    1.0000         0    1.2479
         0         0         0         0    1.0000    4.9968

>> Ln = 1.81818.*(((x).*(x-0.2).*(x-0.3).*(x-0.35))./((-0.1)*(-0.1 - 0.2)*(-0.1-0.3)* ↙
(-0.1-0.35))) + 2.*(((x+0.1).*(x-0.2).*(x-0.3).*(x-0.35))./((0.1)*(-0.2)*(-0.3)* ↙
(-0.35))) + 2.5*(((x+0.1).*(x).*(x-0.3).*(x-0.35))./((0.3)*(0.2)*(-0.1)*(-0.15))) + ↙
2.85714*(((x+0.1).*(x).*(x-0.2).*(x-0.35))./((0.4)*(0.3)*(0.1)*(-0.05))) + 3.07692* ↙
(((x+0.1).*(x).*(x-0.2).*(x-0.3))./((0.45)*(0.35)*(0.15)*(0.05)));
>> Mn=2+((8996/4375).*x)+((15734/7875).*(x.*x))+((3931/3150).*(x.*x.*x))+((1574/315). ↙
*(x.*x.*x.*x));
>> plot(x,Pn,x,Fn)
>> plot(x,Fn,x,Pn,x,Mn,x,Ln)
>> plot(x,Fn,x,Pn,x,Mn)
>> plot(x,Fn,x,Pn,x,Mn,x,Ln)
>> plot(x,Fn,x,Pn,x,Ln)
>> plot(x,Fn,x,Pn,x,Mn,x,Ln)
>> %The graph of all the functions caught me out at first as i thought one of the ↙
functions wasn't there
>> %But it was just demostrating the numerical stability between lagrange/NDD and ↙
monomial
>> %This upon further reflection is pretty inline with what I was expecting, if not ↙
to in-line
>>
```