```
>> syms n k j
>> n=1:1:100;
>> y=(-2/3).^n;
>> plot(n,y)
>> syms x y
>> f=(-2/3)^x

f =

(-2/3)^x

>> limit(f,x,Inf)

ans =

0

>>
>> syms n k x y j
>> a=1/(k+1)-1/k

a =

1/(k + 1) - 1/k
>>  symsum(a,k,1,Inf)

ans =

-1

>>
```