 sum_(k=1)^infty((-1)^(k-1))/k=ln2, 

sum_(k=1)^(n)1/k = gamma+psi_0(n+1),

γ =

-int_0^inftye^(-x)lnxdx

ψ0(z) =

 Psi(z)=d/(dz)lnGamma(z)=(Gamma^'(z))/(Gamma(z)) 

Γ(z) =

int_0^inftyt^(z-1)e^(-t)dt