```
>> clear
>> N=30; p=0.5; x=0:1:N; plot(x,binopdf(x,N,p),'*')
>> hold
>> y=0:0.01:N; mu=N*p; sg=N*p*(1-p); z=(2*pi*sg)^(-1/2)*exp(-(y-mu).^2/(2*sg)); plot(y,z)
>> title('Binopdf N=30, p=0.5 vs normal approximation')


>> clear
>> N=30; p=0.1; x=0:1:N; plot(x,binopdf(x,N,p),'*')
>> hold
>> y=0:0.01:N; mu=N*p; sg=(N*p*(1-p))^(1/2);  plot(y,normpdf(y,mu,sg))
>> title('Binopdf N=30, p=0.1 vs normal approximation')


>> clear
>>ld=36.6; sg=sqrt(ld);x=floor(ld-4*sg):1:floor(ld+4*sg);plot(x,poisspdf(x,ld),'*')
>> hold
>> y=floor(ld-4*sg):0.01:floor(ld+4*sg); plot(y,normpdf(y,ld,sg))
>> title('Poisson 36.6 vs normal approximation')
```