clear clc

[X,Y]=meshgrid(-3:.5:3);

Z=X.^2/16-Y.^2/9;

[X1,Y1]=meshgrid(-3:.1:3);

Z1=X1.^2/16-Y1.^2/9;

figure(1)

subplot(1,2,1),mesh(X,Y,Z)

title('¼Æ1901ÀîÈÝÓî195150118 Êý¾Ýµã²åÈë')

subplot(1,2,2),mesh(X1,Y1,Z1),title('º¯ÊýÍ¼Ïñ')

[Xi,Yi]=meshgrid(-3:0.125:3);

Zi1=interp2(X,Y,Z,Xi,Yi,'\*nearest');

Zi2=interp2(X,Y,Z,Xi,Yi,'\*linear');

Zi3=interp2(X,Y,Z,Xi,Yi,'\*spline');

Zi4=interp2(X,Y,Z,Xi,Yi,'\*cubic');

figure(2)

subplot(2,2,1),mesh(Xi,Yi,Zi1),title('×î½üµã²åÈë')

subplot(2,2,2),mesh(Xi,Yi,Zi2),title('ÏßÐÔ²åÈë')

subplot(2,2,3),mesh(Xi,Yi,Zi3),title('ÑùÌõ²åÈë')

subplot(2,2,4),mesh(Xi,Yi,Zi4),title('Á¢·½²åÈë')

