

clc; clear; close all;

x1 = [2 0 0 4 2];

y1 = [4 4 0 -4 4];

y2 = 0 : 0.01 : 4;

x2 = 0.5 .\* sqrt(y2) .\* (4 - sqrt(y2));

figure;

plot(x1, y1, 'b-o', x2, y2, 'k--');

title('physical coordination');

xlabel('x');

ylabel('y');

legend('physical shape', 'cooresponding line', 'Location', 'northeast');

axis([-3 7 -4 4]);