```matlab
close all; clc; clear all;
t=linspace(-5,5,500);
x = zeros(length(t));
for i = 1:length(t)
    if t(i) >= -5 && t(i) <= -3
        x(i) = -t(i)+1;
    elseif t(i) >= -3 && t(i) <= -1
        x(i) = 4;
    elseif t(i) >= -1 && t(i) <= 1
        x(i) = 4*cos(2*pi*t(i));
    elseif t(i) >= 1 && t(i) <= 4
        x(i) = t(i) +3;
    elseif t(i) >= 4 && t(i) <= 5
        x(i) = -3*t(i) + 19;
    end
end
plot(t,x);
```