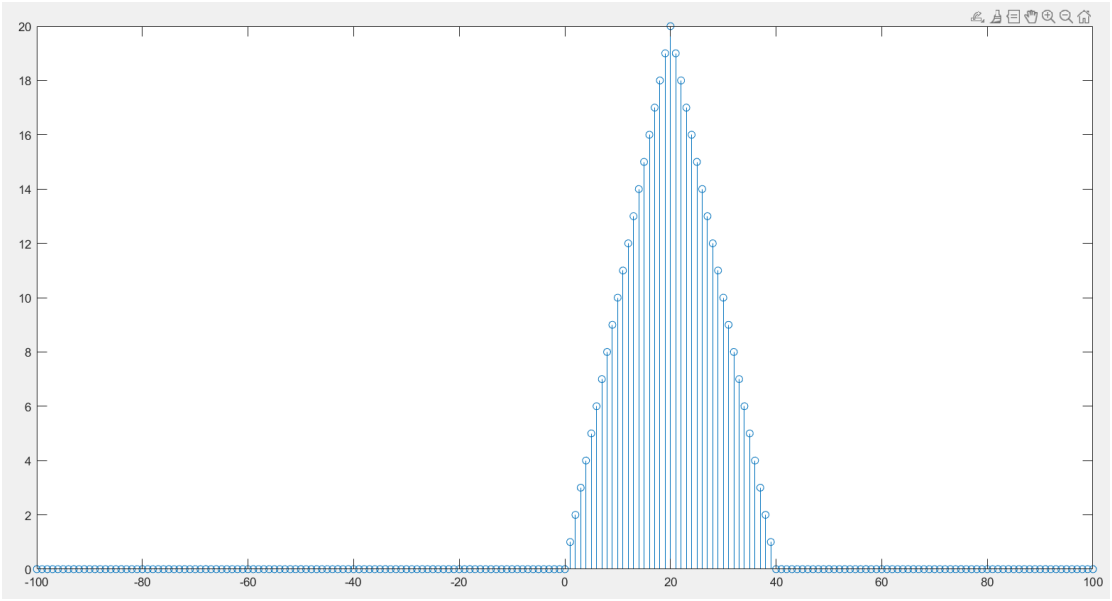
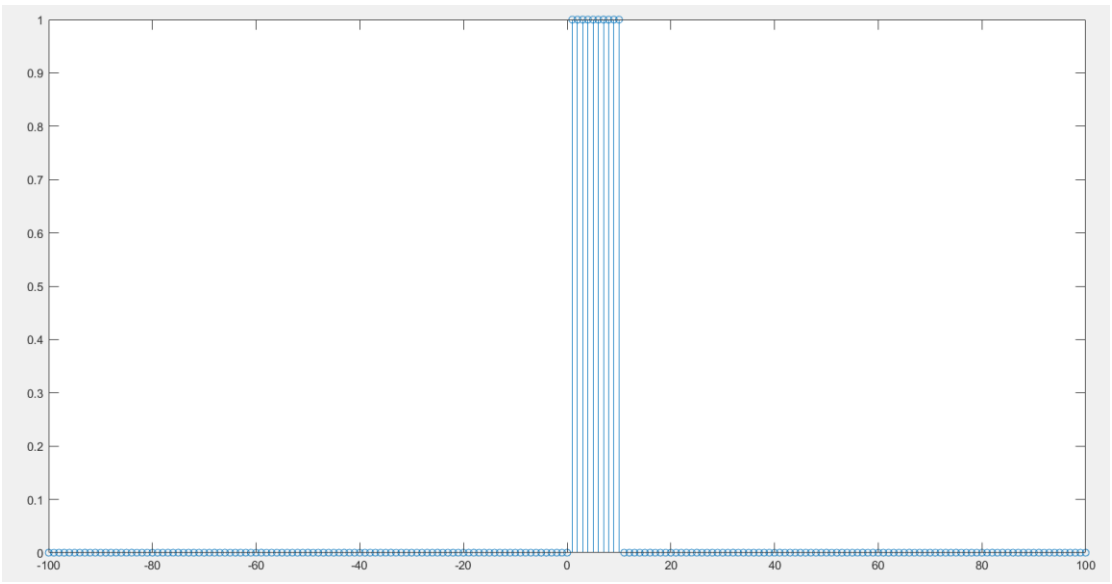
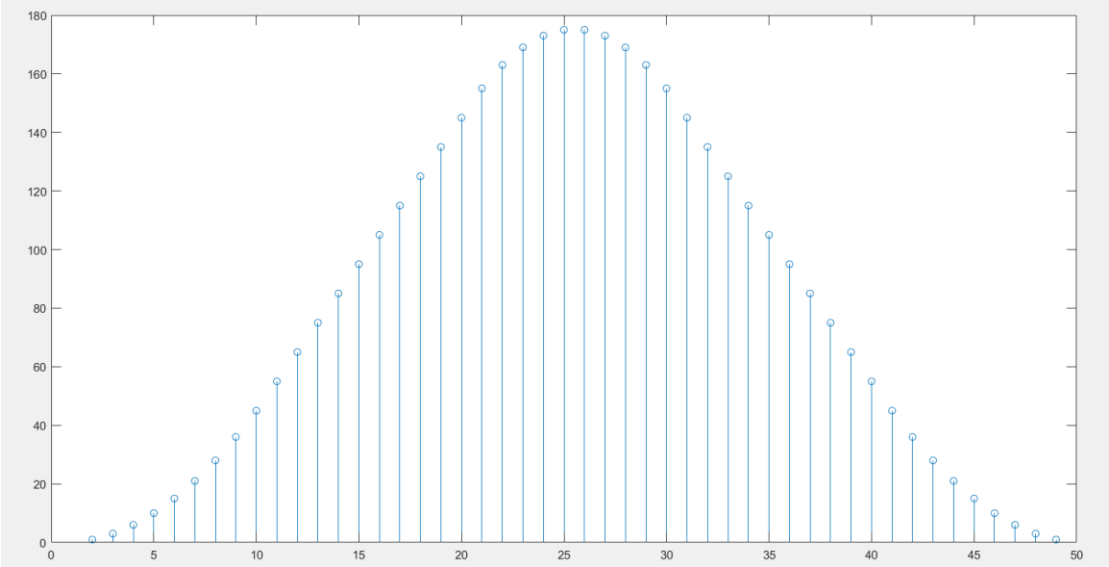
# B11901148 MATLAB HW1 Report

(a)



(b)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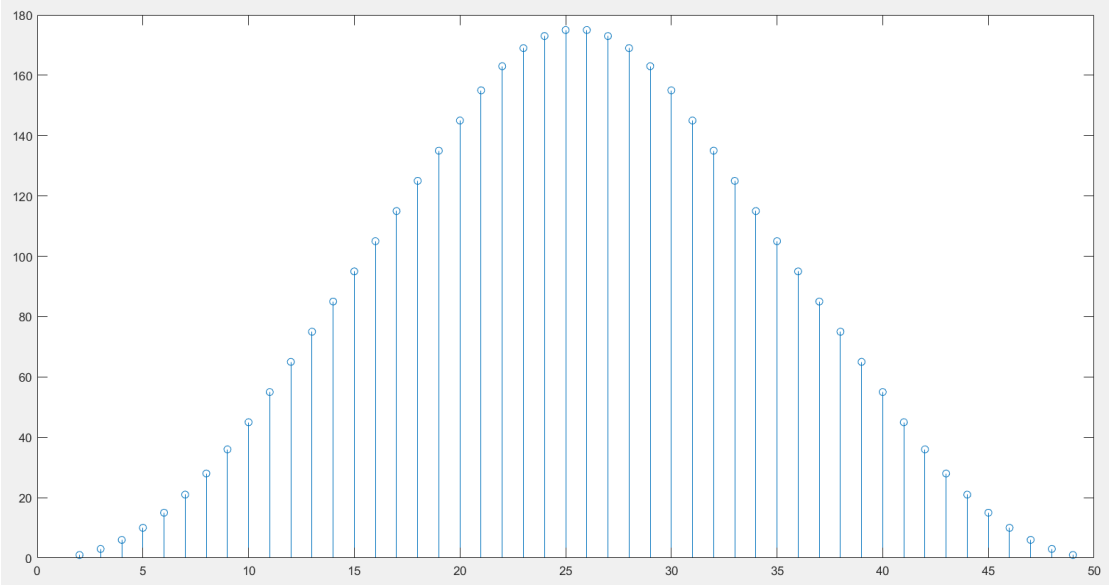
(c)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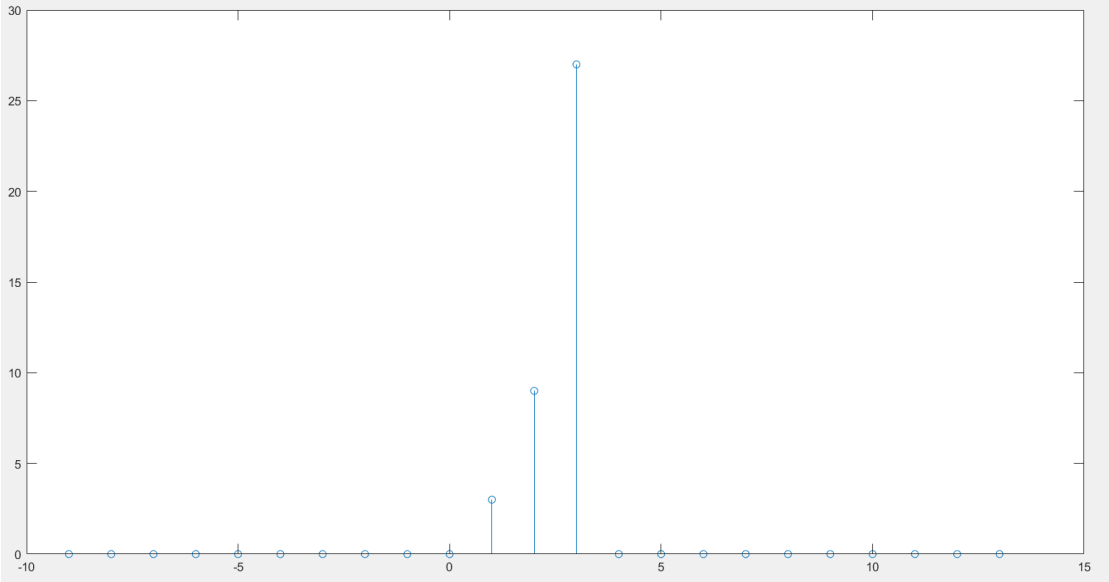
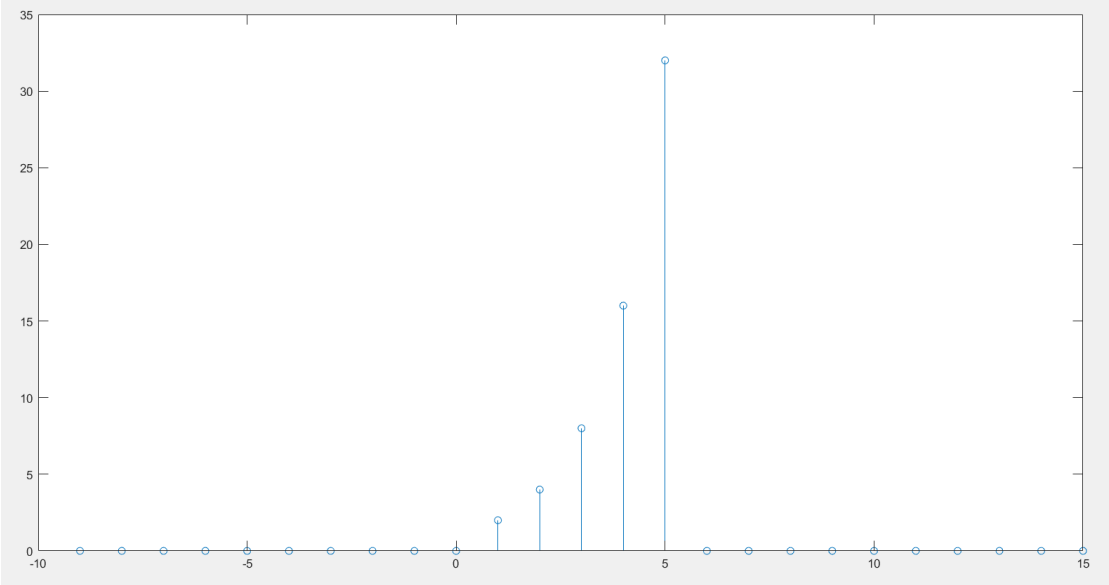
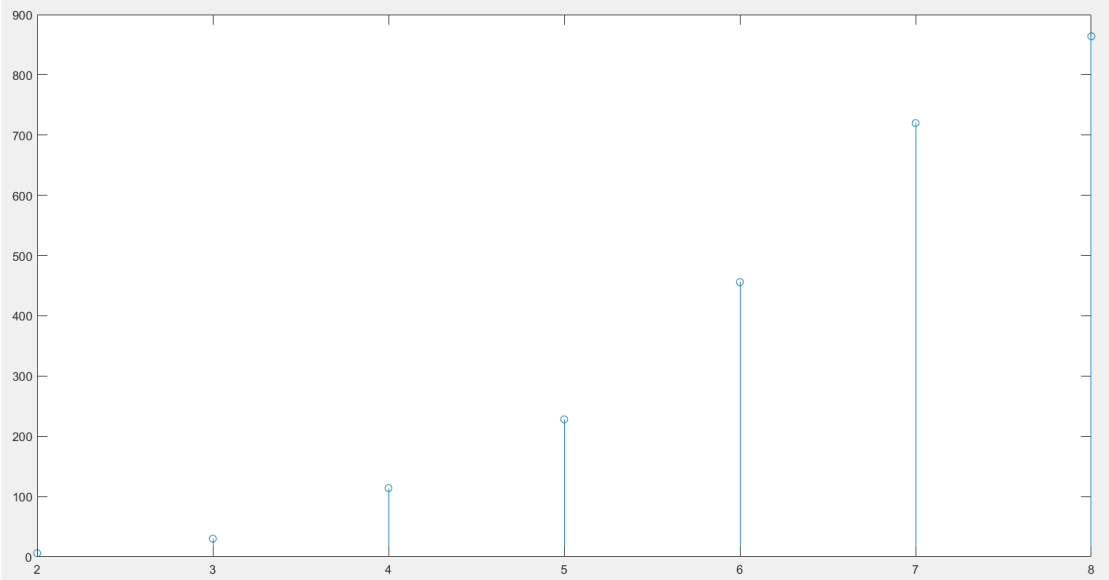
(d)

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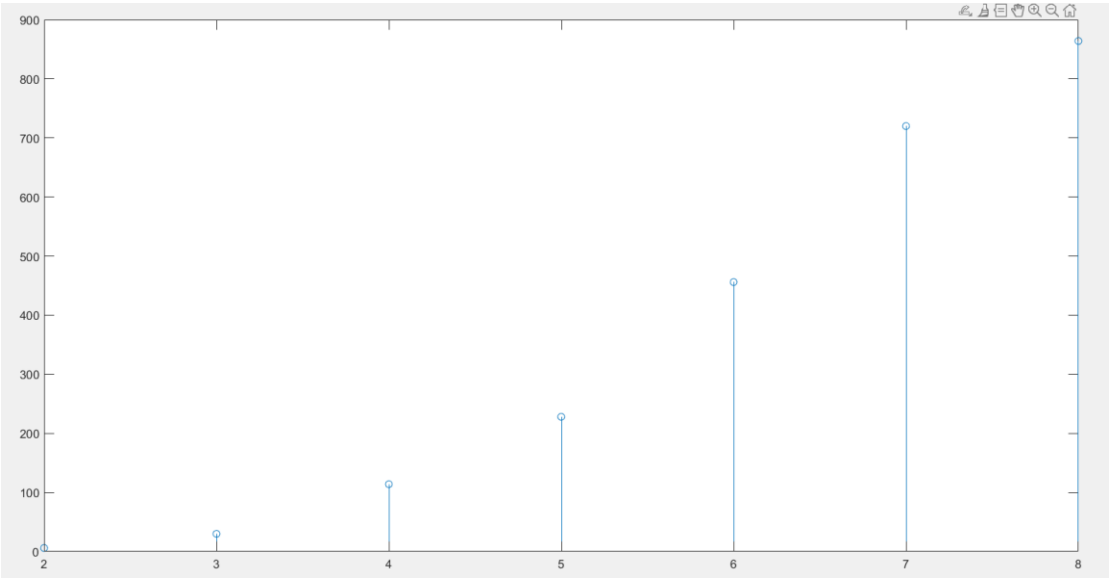
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Code for Part C

```
%%
%(c)

matrix1 = zeros(48,10);
for i = 1:39
    for j = 1:min(i,10)
        matrix1(i,j) = x1(i-j+1);
    end
end

for i =40:48
    for j = i-38:10
        matrix1(i,j) = x1(39-(j-(i-38)));
    end
end

y = matrix1*x2;
figure
stem(n,y);
```

沿用前面的變數宣告

```
n = 2:1:49
N1 = 1:1:39;
x1 = 0*(N1<=0&N1>=40)+N1.*(N1>=1&N1<=20)+(40-N1).*(N1>=21&N1<=39);
N2 = 1:1:10;
unitstep1 = N2>=1;
unitstep11 = N2>=11;
x2 = unitstep1 - unitstep11;
x1 = transpose(x1);
x2 = transpose(x2);
```