```
n = [-3:3];
x = 2*n;
```

```
n = [-3:3]
```

```
n = 1×7
    -3    -2    -1     0     1     2     3
```

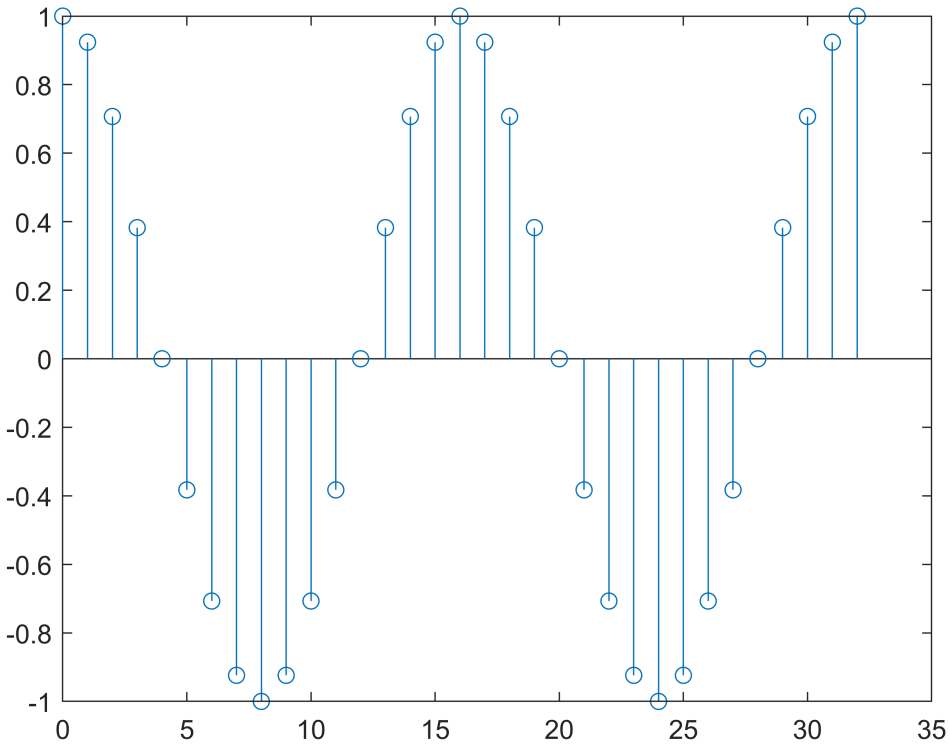
```
n = [-5:5];
x = [00 x 00];
```

```
n = [-100, 100];
x = [zeros(1,95) x zeros(1,95)];
```

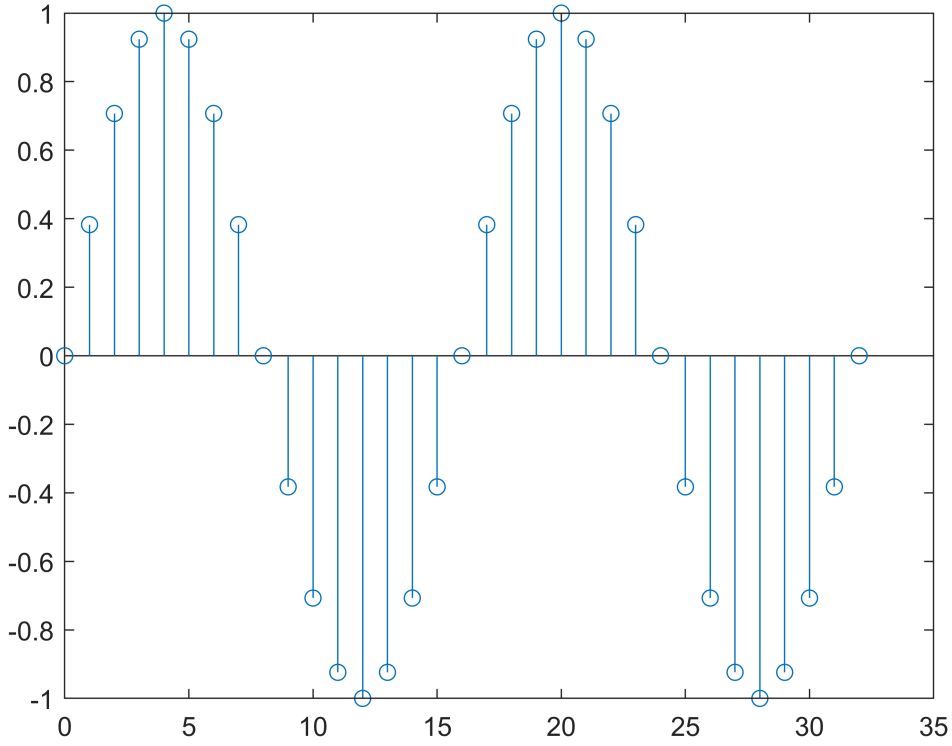
```
nx1 = [0:10];
x1 = [1 zeros(1,10)];
nx2 = [-5,5];
x2 = [zeros(1,3) 1 zeros(1,7)];
```

```
n = [0:32];
x = exp(j*(pi/8)*n);
```

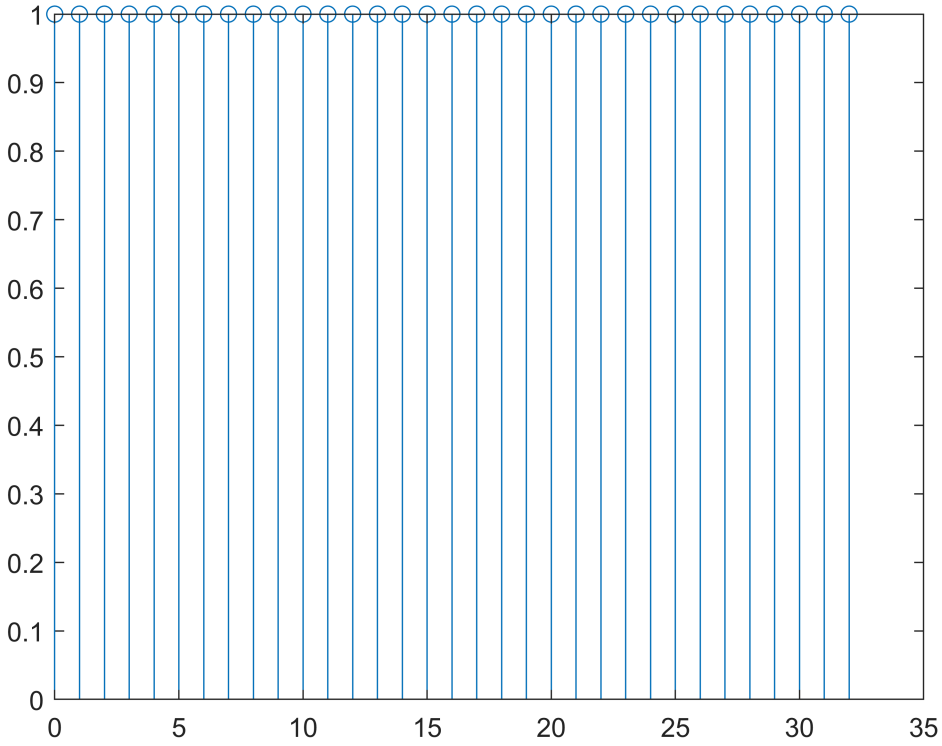
```
stem(n, real(x))
```



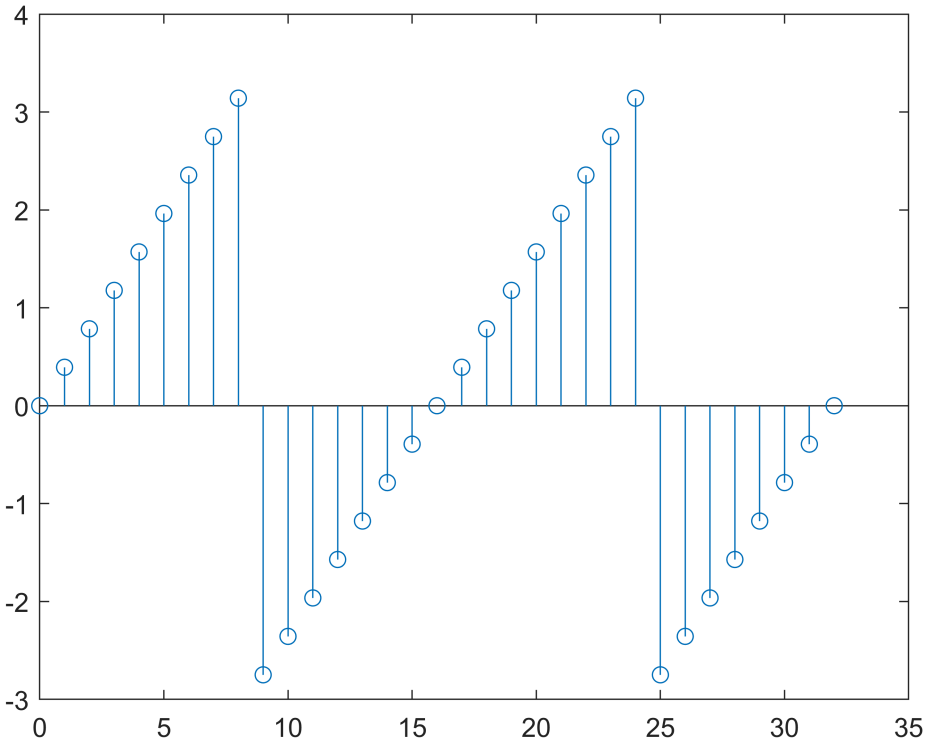
```
stem(n,imag(x))
```




```
stem(n,abs(x))
```




```
stem(n,angle(x))
```



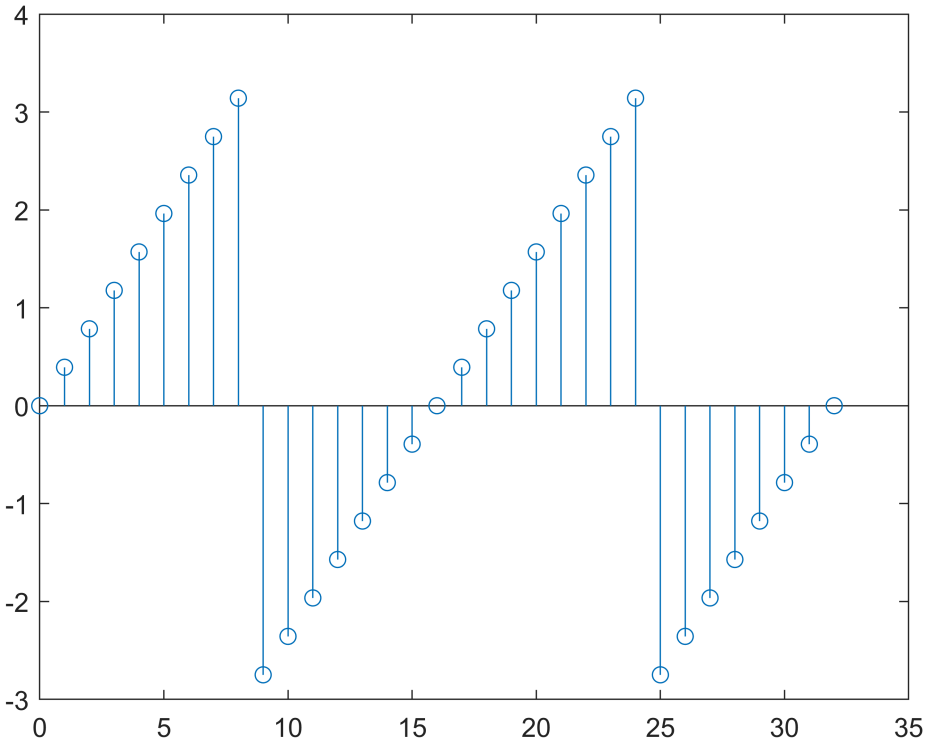
```
x1 = sin((pi/4)*[0:15]);
x2 = cos((pi/7)*[0:15]);
```

```
y1 = x1+x2;
y2 = x1-x2;
y3 = x1.*x2;
y4 = x1./x2;
y5 = 2*x1;
y6 = x1.^3;
```

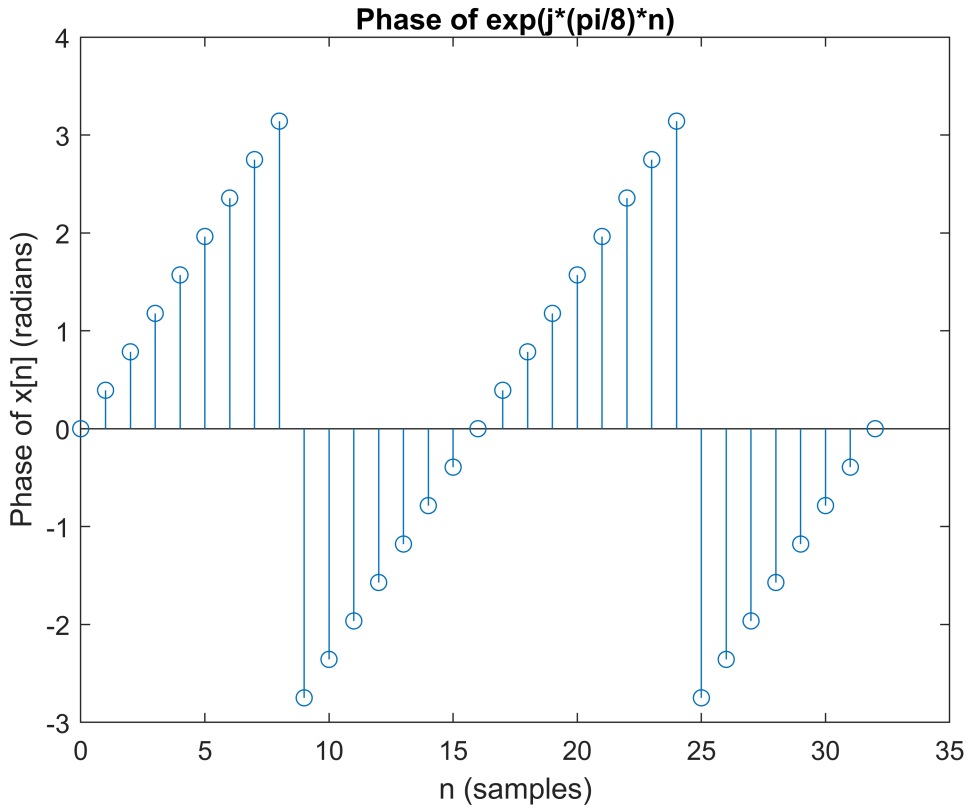
```
x1*x2
```

```
Error using  *
Incorrect dimensions for matrix multiplication. Check that the number of columns in the first matrix matches
 the number of rows in the second matrix. To perform elementwise multiplication, use '.*'.
```

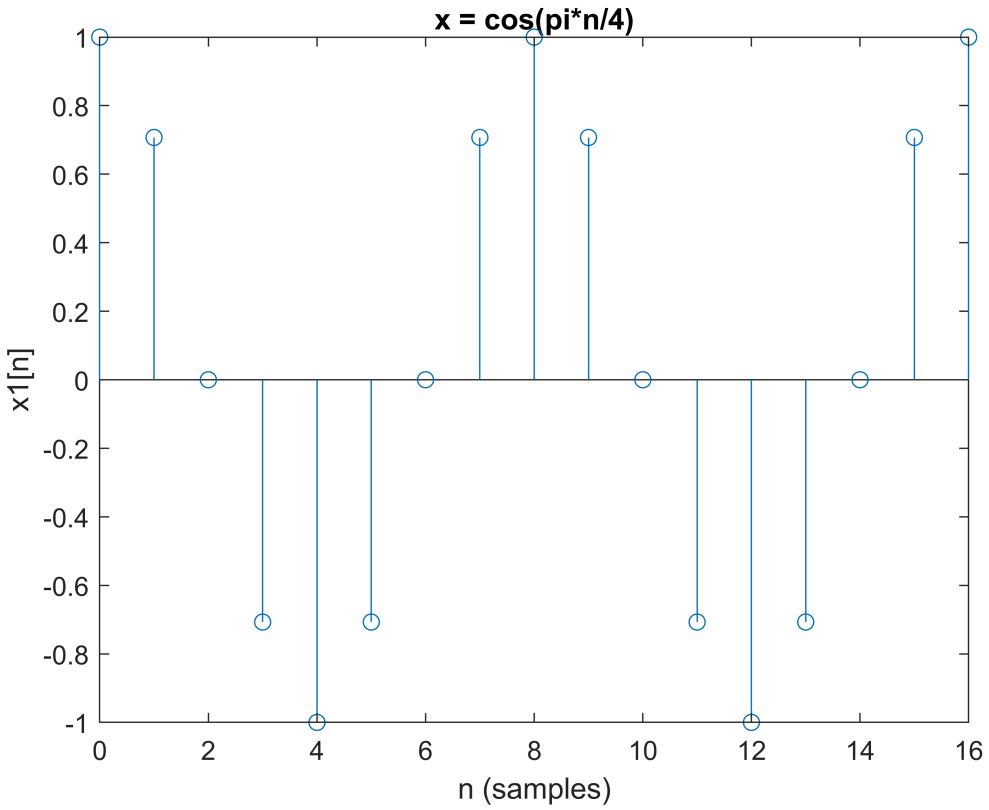
```
n = [0:32];
x = exp(j*(pi/8)*n);
stem(n, angle(x))
```



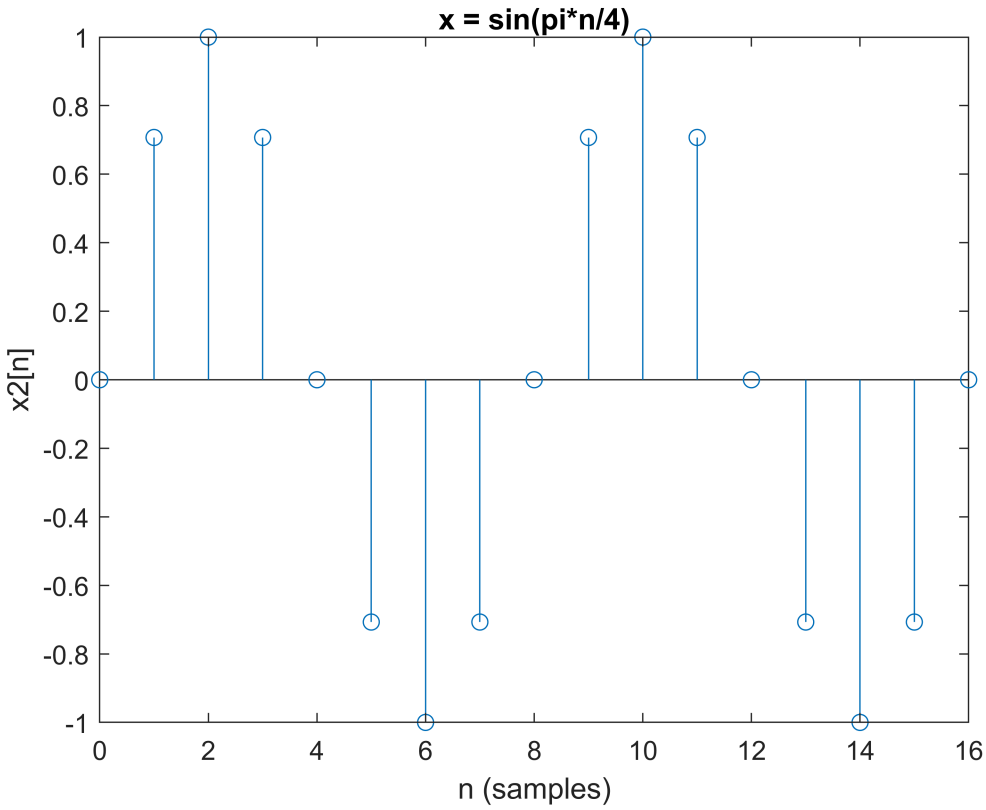

```
title('Phase of exp(j*(pi/8)*n)')
xlabel('n (samples)')
ylabel('Phase of x[n] (radians)')
```




```
%prob1.m
n = [0:16];
x1 = cos(pi*n/4);
y1 = mean(x1);
stem(n, x1);
title('x = cos(pi*n/4)')
xlabel('n (samples)')
ylabel('x1[n]')
```




```
% prob2.m
n = [0:16];
x2 = sin(pi*n/4);
y2 = mean(x2);
stem(n, x2);
title('x = sin(pi*n/4)')
xlabel('n (samples)')
ylabel('x2[n]')
```




```
[y,z] = foo(-40)
```

```
y = -80
z = -40
```

```
[y,z] = foo(212)
```

```
y = 424
z = 100
```

```
function [y,z] = foo(x)
% [y,z] = foo(x) accepts a numerical argument x and
% returns two arguments y and z, where y is 2*x
% and z is (5/9)*(x-32)
y = 2*x;
z = (5/9)*(x-32);
end
```