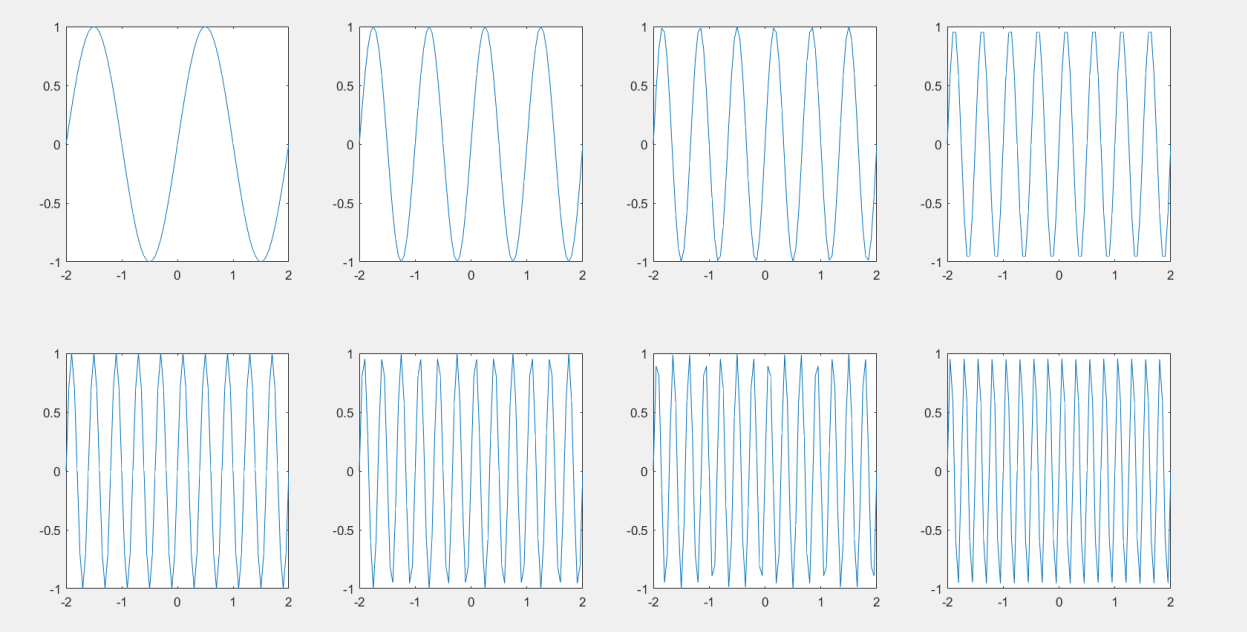
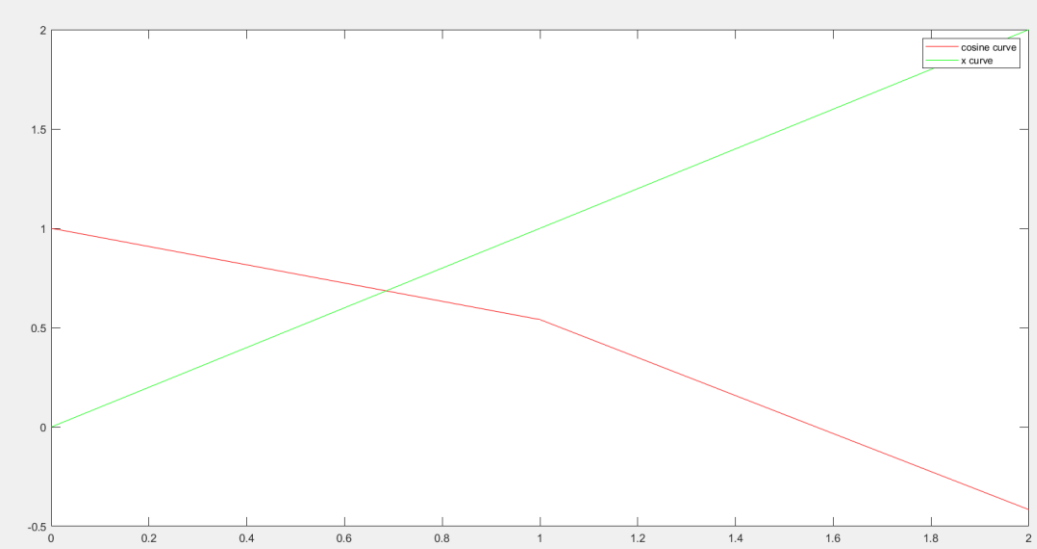
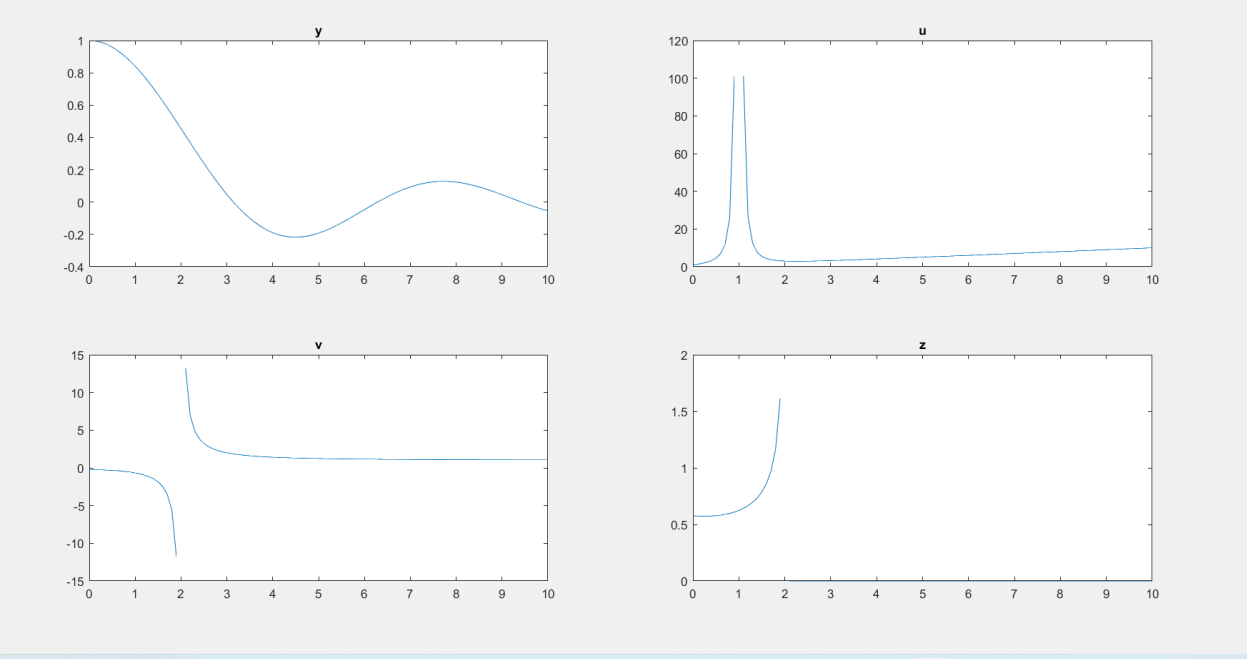
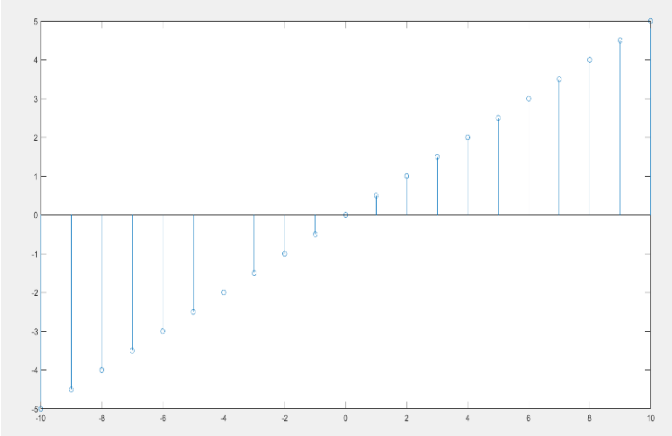
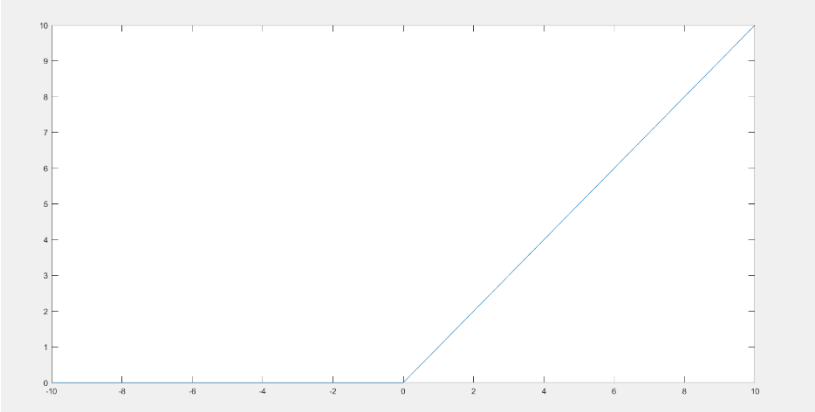


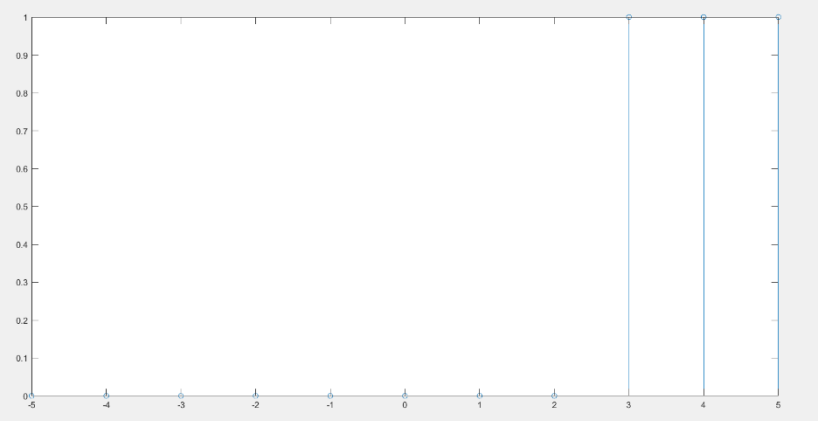


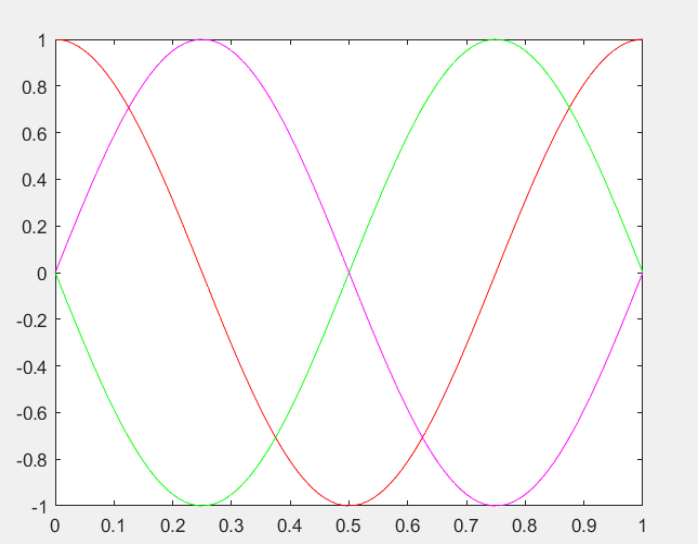

```
t=0:0.01:1;
y1 = cos(2*pi*t);
y2= cos((2*pi*t)+(pi./2));
y3= cos((2*pi*t)-(pi./2));
y4 = sin(2*pi*t);
plot(t,y1,'r-',t,y2,'g-',t,y3,'b-',t,y4,'m-')
```


y
u
v
z



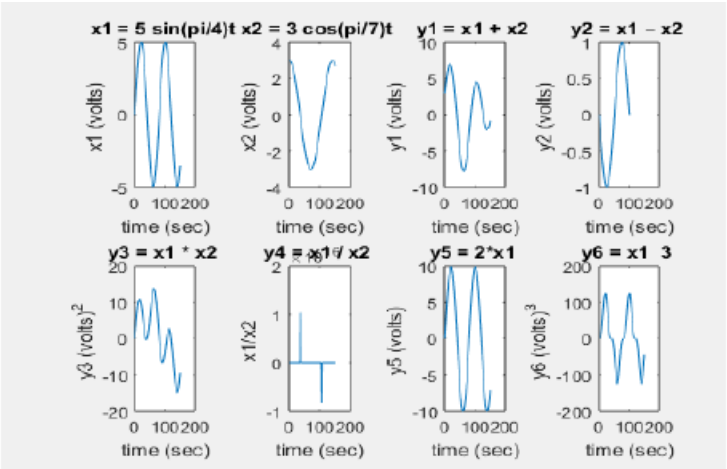




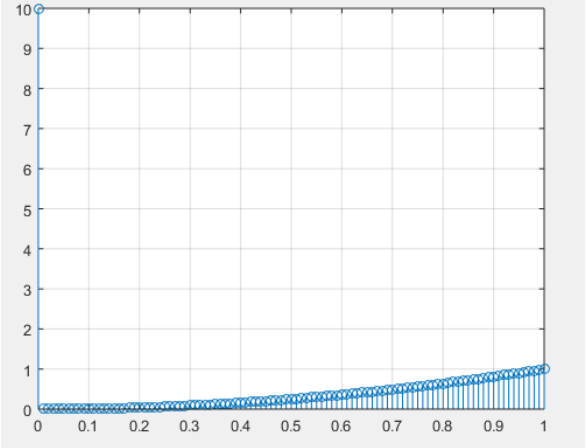
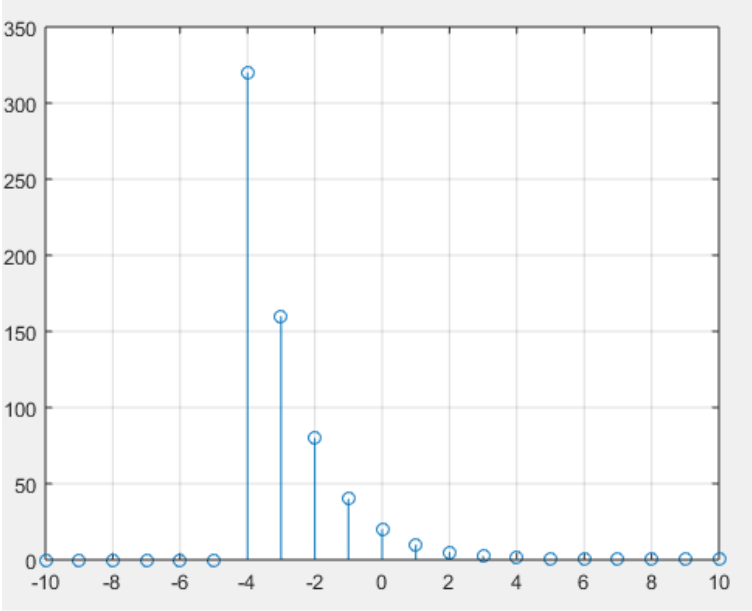


```
x1 = 5*sin((pi/4)*[0:0.1:15]);
x2 = 3*cos((pi/7)*[0:0.1:15]);
subplot(2,4,1), plot(x1) ;
title('x1 = 5 sin(pi/4)t ');
xlabel(' time (sec) ');
ylabel('x1 (volts) ') ;
subplot(2,4,2), plot(x2);
title('x2 = 3 cos(pi/7)t ');
xlabel(' time (sec) ') ;
ylabel('x2 (volts) ') ;
y1 = x1 + x2;
y3 = x1 .* x2;
y4 = x1 ./ x2;
y5 = 2*x1;
y6 = x1 .^3;

subplot(2,4,3), plot(y1);
title('y1 = x1 + x2 ') ;
xlabel(' time (sec) ');
ylabel('y1 (volts) ') ;
subplot(2,4,4), plot(y2);
title('y2 = x1 - x2 ');
xlabel(' time (sec) ');
ylabel('y2 (volts) ') ;
subplot(2,4,5), plot(y3);
title('y3 = x1 * x2 ');
xlabel(' time (sec) ');
ylabel('y3 (volts)^2 ');
subplot(2,4,6), plot(y4);
title('y4 = x1 / x2 ');
xlabel(' time (sec) ');
ylabel('x1/x2 ');
subplot(2,4,7), plot(y5);
title('y5 = 2*x1 ') ;
xlabel(' time (sec) ');
ylabel('y5 (volts) ') ;
subplot(2,4,8), plot(y6);
title('y6 = x1 ^ 3 ') ;
xlabel(' time (sec) ');
ylabel('y6 (volts)^3 ');
```




```
t = -10:10;
y1 = (t.^2).*(t>=-5);
y2 = (t.^2).*(t>=6);
y3 = 10.*(t==0) ;
y5 = 20*(0.5).^t.*(t>=4);
y6 = 20*(0.5).^t.*(t>=10);
final_y = y1 - y2 + y3 + y5 - y6;
figure, stem(t, final_y);
grid on;
```



```
t = -10:10;
y1 = ((0.2).^(t)).*(t>=5);
y2 = ((0.2).^(t)).*(t>=-6);
y3 = y1+y2;
y4 = 1.*(t==5);
y5 = y4.*y3;
y6 = (20*(0.5.^(t))).*(t>=-4);
figure, stem(t, y6);
grid on;
```