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| --- | --- |
| %%BASIC SIGNALS  %% D MOTI RAJ  %% 161210017  %%sin function  t=-2\*pi:0.01:2\*pi  y=sin(t)  subplot(3,3,1)  plot(t,y)  xlabel('t')  ylabel('sin(t)')  title('y=sin(t)')    %%cosine function  y=cos(t)  subplot(3,3,2)  plot(t,y)  xlabel('t')  ylabel('cos(t)')  title('y=cos(t)')    %%sinc function  t=-2\*pi:0.01:2\*pi  y=sinc(t)  subplot(3,3,3)  plot(t,y)  xlabel('t')  ylabel('sinc(t)')  title('y=sinc(t)')    %%exponential function  y=exp(t)  subplot(3,3,4)  plot(t,y)  xlabel('t')  ylabel('exp(t)')  title('y=exp(t)')    %%gaussian function  t=-3:0.01:3  y=exp(-t.^2)  subplot(3,3,5)  plot(t,y)  xlabel('t')  ylabel('g(t)')  title('gaussian function') | %%unit step function  a1=-4:0  b1=0.\*a1  a2=0:4  b2=a2.^0  a=[a1 a2]  b=[b1 b2]  subplot(3,3,6)  plot(a,b,'r')  xlabel('t')  ylabel('u(t)')  title('unit step function')    %%rectangular function  a1=-5:-2  a2=-2:2;  a3=2:5  b1=0.\*a1  b2=a2.^0  b3=0.\*a3  a=[a1 a2 a3]  b=[b1 b2 b3]  subplot(3,3,7)  plot(a,b,'r')  xlabel('t')  ylabel('rec(t)')  title('rectangular function')    %%signum function  a1=-3:0  a2=0:3  b1=-(a1.^0)  b2=(a2.^0)  a=[a1 a2]  b=[b1 b2]  subplot(3,3,8)  plot(a,b,'r')  xlabel('t')  ylabel('sig(t)')  title('signum function')    %%triangular function  a1=-5:-1  a2=-1:1  a3=1:5  b1=0\*a1  b2=1-abs(a2)  b3=0\*a3  a=[a1 a2 a3]  b=[b1 b2 b3]  subplot(3,3,9)  plot(a,b,'r')  xlabel('x')  ylabel('t(x)')  title('triangular function') |
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