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```
function y = lab3_demo(t)
```

```
if nargin == 0
    t = 0:0.01:6.5;
end
%t_saw = 0:0.01:0.5;
t_sawf = (t>=0)&(t<0.5); t_saw = t(t_sawf);
%t_zero = 0.5:0.01:1.5
t_zerof = (t>0.5)&(t<1.5);t_zero=t(t_zerof);
%t_noise = 5:0.01:6.5;
t_noisef = (t>5)&(t<6.5);t_noise=t(t_noisef);
%t_const = 3.5:0.01:5;
t_constf = (t>3.5)&(t<5);t_const=t(t_constf);
%t_sin=1.5:0.01:3.5
t_sinf = (t>1.5)&(t<3.5);t_sin=t(t_sinf);</pre>
```

#### Sinusoida

```
A0=0; A=1.5;

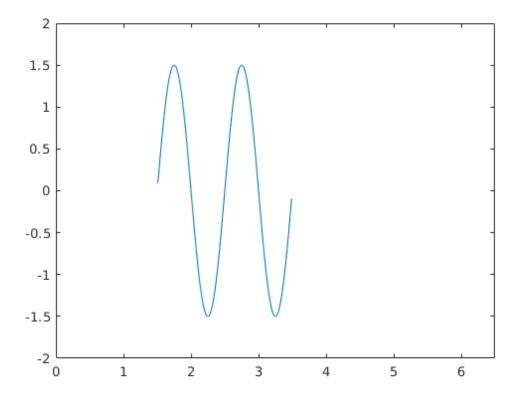
T = (3.5-1.5)/2;

f = 1/T;delay=1.5;

y_sin=A0+A*sin(2*pi*f*(t_sin-delay));

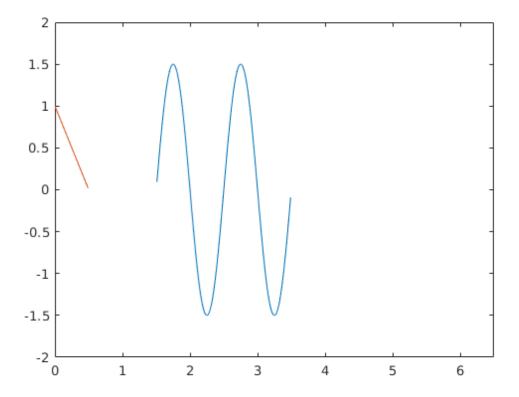
plot(t_sin,y_sin)

axis([0 6.5 -2 2])
```



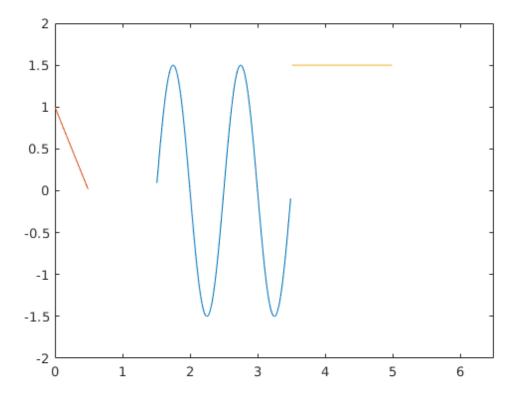
## Lineari mainiga funkcija

```
k = (1-0)/(0-0.5);
delay = 0.5;
y_saw = k*(t_saw-delay);
hold on
plot(t_saw,y_saw)
```



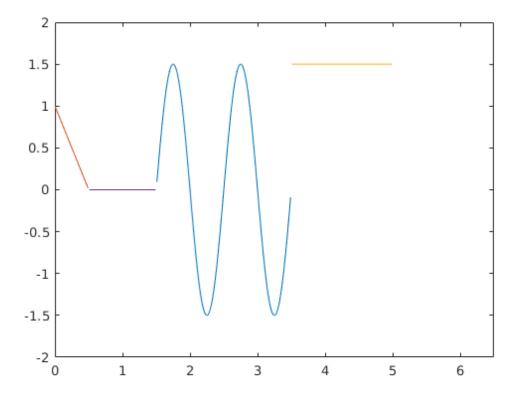
## Konstantes signals

```
y_const = zeros(size(t_const))+1.5;
plot(t_const,y_const)
```



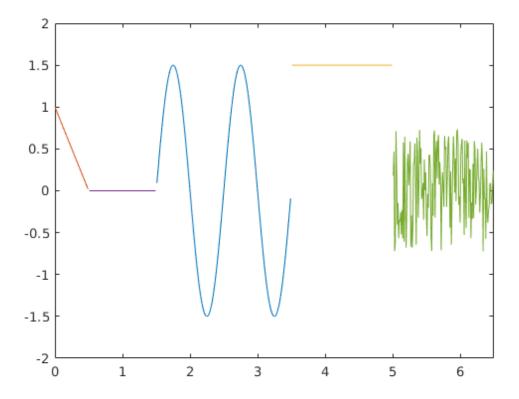
# Nullu signals

```
y_zero = zeros(size(t_zero));
plot(t_zero,y_zero)
```



# Troksna signals

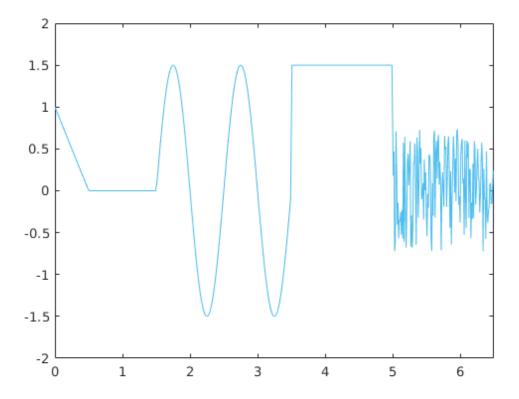
y\_noise = 1.5\*rand(size(t\_noise))-0.75;
plot(t\_noise,y\_noise)



### Apvienosim visu viena vektora

```
t = [t_saw,t_zero,t_sin,t_const,t_noise];
y = [y_saw,y_zero,y_sin,y_const,y_noise];
if nargout == 0
    plot(t,y);
    y = [];
end
%axis([0 6.5 -2 2])
```

ans =



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