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videjas vertibas aprekins

```
t=0:0.1:7.5;
N = length(t);

%* ar formulu 3a
xvid3a = 1/(N-1) * sum(sig(t(1:end-1)))
%* ar formulu 3b
xvid3b = 1/(N-1) * sum(sig(t(2:end)))
%* ar formulu 3c
h = (t(end)-t(1))/(N-1);
xvid3c = 1/(N-1) * sum(sig(t(1:end-1)+h/2))
%* ar formulu 4
xvid4 = 1/(N-1)* ((sig(t(1)) + sig(t(end)))/2 + sum(sig(t(2:end-1))))

xvid3a =

    -0.3650

xvid3b =

    -0.3304

xvid3c =

    -0.3625

xvid4 =

    -0.3477
```

istas videjas vertibas aprekins

- `sinuso#da`

```
syms t_sin
```

```

A0 = 0; A = 3; T = (1.5)/8; f = 1/T; delay = 1;
y_sin = A0+A*sin(2*pi*f*(t_sin-delay));
int_sin = int(y_sin,t_sin,0,1.5)
% * saw
syms t_saw
yA = 0; yB = 0.375; tA = 4.5; tB = 6; delay = 4.5;
k = (yA-yB)/(tA-tB);
y_saw = k*(t_saw-delay);
int_saw = int(y_saw,t_saw,4.5,6)
% * const
syms t_const
y_const = -3;
int_const = int(y_const,t_const,3.5,4.5)

```

```
int_sin =
```

```
0
```

```
int_saw =
```

```
9/32
```

```
int_const =
```

```
-3
```

Liekam visu kopa

```
ista_vv = double(1/7.5*(int_const+int_saw+int_sin))
```

```
ista_vv =
```

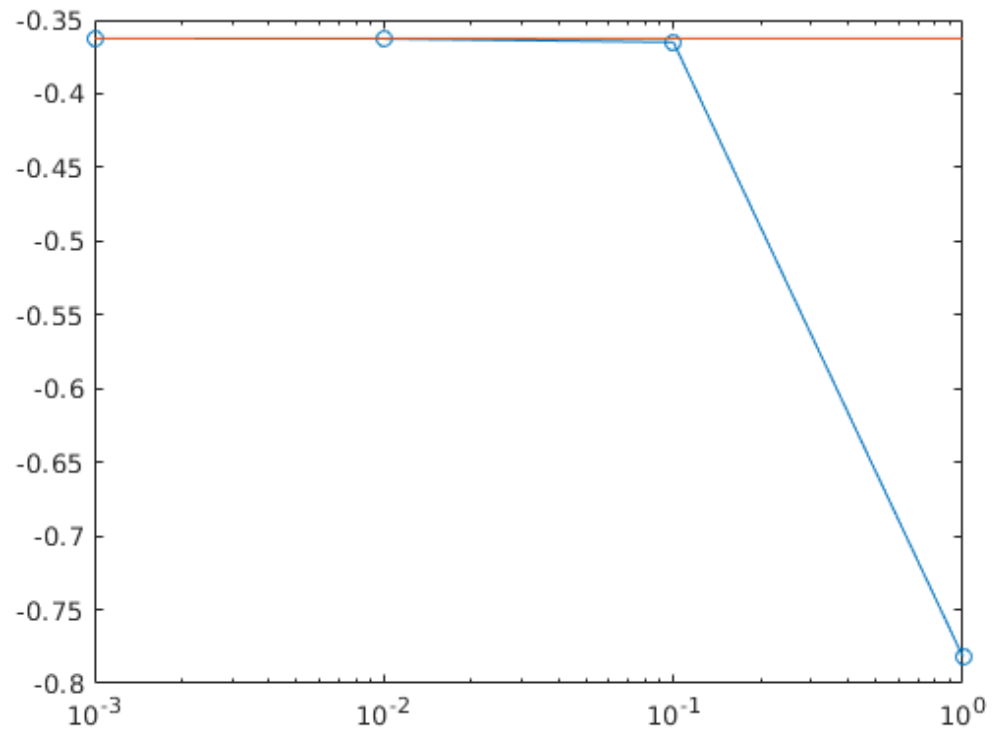
```
-0.3625
```

Salidzināsim 3a ar isto vv

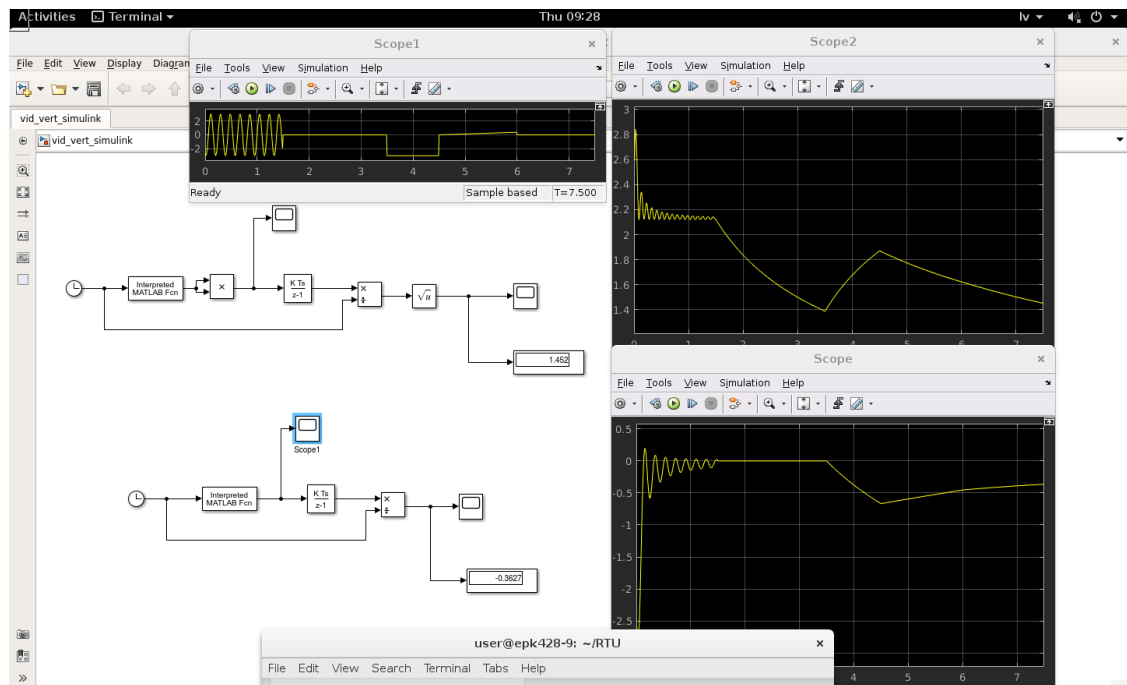
```

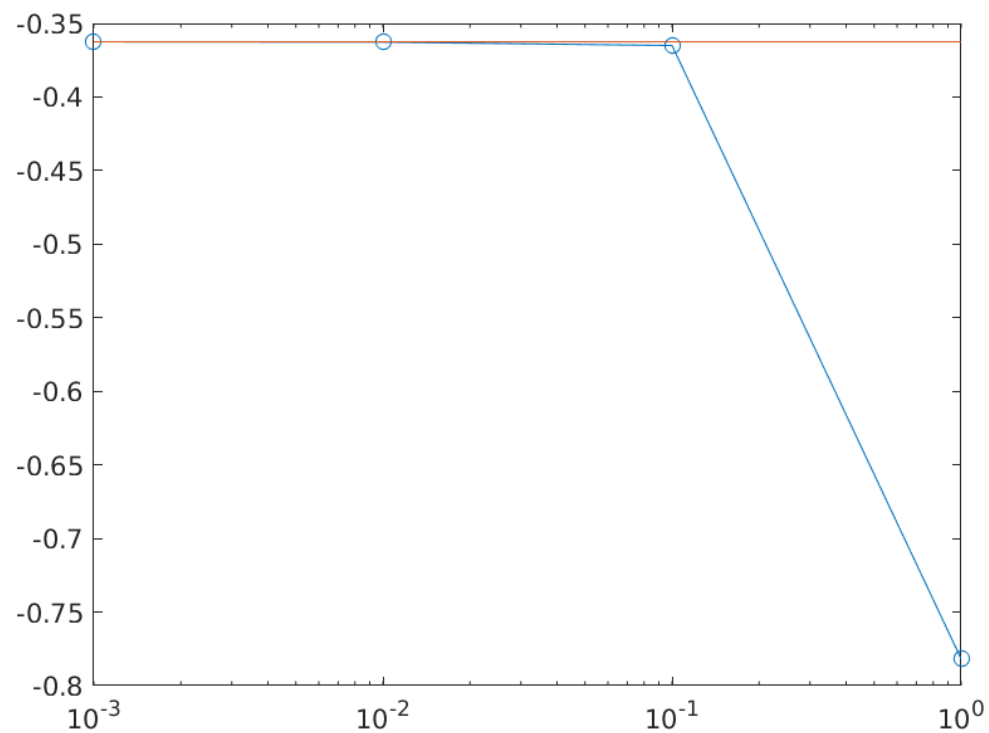
dt = [1 0.1 0.01 0.001]; % laika solis
xvid3am = [];
for dtc = dt
    t = 0:dtc:7.5;
    N = length(t);
    xvid3a = 1/(N-1) * sum(sig(t(1:end-1)));
    xvid3am = [xvid3am,xvid3a];
end
semilogx(dt,xvid3am,'-o',dt,dt*0+ista_vv)

```



Simulink





Piezime

lai simulink palaistos vajadz#tu defin#t $dt = 0.01$

Secinajumi:

Stravas signala apr#kinus var veikt manuali, vai izmantojot simulink blokshemas

Precizakus rezult#tus iegust lietojot mazaku soli dt

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