

Logger Pro - 9A*

File Edit Experiment Data Analyze Insert Options Page Help

Data Browser

No device connected.

	t (s)	y
117	1,16	2,
118	1,17	2,
119	1,18	2,
120	1,19	2,
121	1,20	2,
122	1,21	2,
123	1,22	2,
124	1,23	2,
125	1,24	2,
126	1,25	2,
127	1,26	2,

New Data Set
Show Data Set >
Hide Data Set >
Data Set Options >
Sort Data Set >
Delete Data Set >
New Manual Column...
New Calculated Column...
User Parameters...
Column Options >
Delete Column >
Clear All Data Ctrl+Alt+K

New Calculated Column

Column Definition Options

Labels and Units:

Name: Nopeus
Short Name: v

Destination:
Data Set:

Expression:

- analysis >
- beatsPerMinute >
- blood pressure >
- boolean >
- calculus >
- collapse >
- collapseIndirect >
- constant >
- delta >
- digital filtering >
- ElectrophoresisInterpolate >
- exp >
- integer >
- interpolate >

derivative
derivativeSG
derivativeTimeShift
integral
secondDerivative
secondDerivativeSG
secondDerivativeTimeShift

Expression:

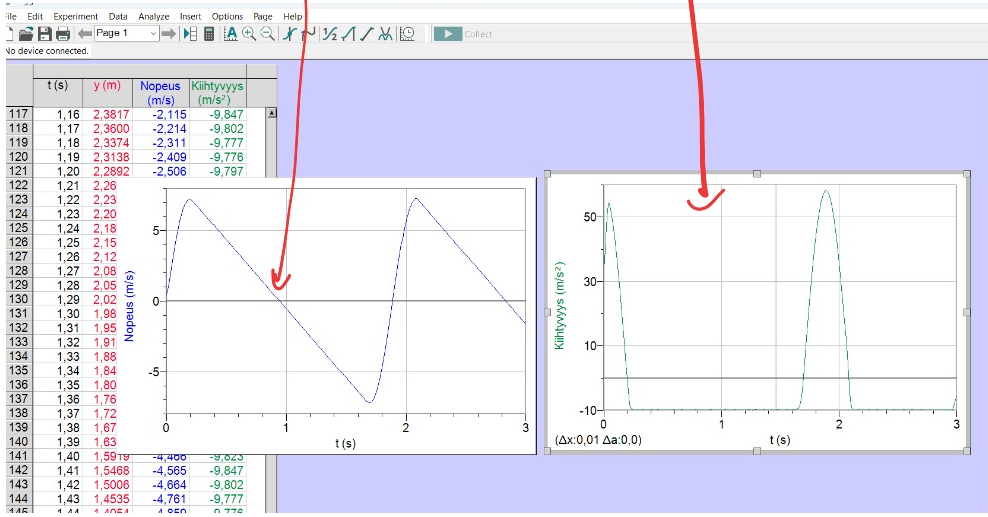
derivative("y (m)", "t (s)", "t")

Functions > Variables (Columns)

punkkiot

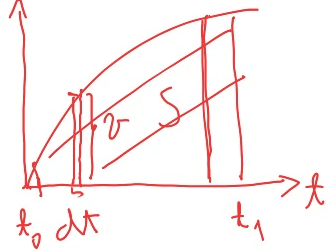
jälkeen väliin

FY YO S24 tehtävän 9 nopeuden ja kiihtyvyyden kuvaajat



Matka

nopeus: $v = \frac{dx}{dt} \Leftrightarrow dx = v dt$



$$X = \int_{t_0}^{t_1} v dt = \int_{t_0}^{t_1} v(t) dt$$

$$S = \int_{t_0}^{t_1} v(t) dt$$

Matka on (v, t) -kuvaajassa käyrän ja t -akselin välinen pinta-ala.

Erin.

$$v(t) = v_0 + at$$

$$X = \int v_0 + at dt$$

$$= v_0 t + \frac{1}{2} at^2 + X_0$$

"integroimisvakio"