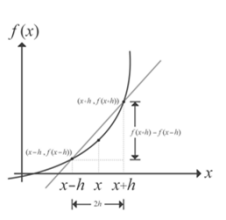


Differentiation

A Slippery Slope - Jerks You Around - Accelerates Your Mind



$\frac{d}{dt}$

Position
Velocity
Acceleration
Jerk
Snap
Crackle
Pop

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1

Acceleration of a rocket


$$v = 2000 \log_e \left(\frac{14 \times 10^4}{14 \times 10^4 - 2100t} \right) - 9.8t$$

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2

Oil Spill



Time (s)	0	0.5	1.0	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0
Radius(m)	0	0.236	0.667	1.225	1.886	2.635	3.464	4.365	5.333	6.364	7.454

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