

Quick notes on doing math with WolframAlpha on the web at [wolframalpha.com](http://wolframalpha.com)

You can ask things like *what is the highest mountain in peru?* or *what is the age distribution in mongolia?*

Or you can do some math. Enter the following lines and hit return or click the = button

ROOTS of nonlinear equation with symbolic variables, enter:

$$(k1 + k2*x^2) * t = 0$$

ROOTS of nonlinear equation with constants, enter:

$$(0.004*x^{0.5} + 0.25*x^2) * 10 = 0$$

DERIVATIVE with symbolic variables, enter:

$$\text{derivative of } k2*x/(k1*x^{0.5}+k3*x^2) \text{ with respect to } x$$

DERIVATIVE with constants, enter:

$$\text{derivative of } 0.3*x/(0.3*x^{0.5}+0.25*x^2) \text{ with respect to } x$$

DERIVATIVE with constants and evaluate at specified value, enter:

$$\text{derivative of } 0.3*x/(0.3*x^{0.5}+0.25*x^2) \text{ with respect to } x \text{ at } x = 0.5$$

INTEGRAL, indefinite, enter:

$$\text{integral of } dx/(1-x)$$

INTEGRAL, definite, enter:

$$\text{integral of } dx/(1-x) \text{ from } x = 0 \text{ to } x = 0.5$$