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How to TYPE a Formula in MS Word 2007-10?

To write a formula in MS Office 2007-10, there are two different ways; amateur way and skilled way. I'm sure we all know the non-professional way completely, so in this document only the trained method has been defined and exemplified. This document works as a handout (or a brochure) and I assume you have heard my presentation, and are familiar with the method of inserting formulas.

Greek Letters

\alpha	α
\beta	β
\gamma	γ
\delta	δ
\varepsilon	ε
\epsilon	ϵ
\zeta	ζ
\eta	η
\theta	θ
\vartheta	ϑ

\iota	ι
\kappa	κ
\lambda	λ
\mu	μ
\nu	ν
\xi	ξ
\o	o
\pi	π
\varpi	ϖ
\rho	ρ

\varrho	ϱ
\sigma	σ
\varsigma	ς
\tau	τ
\upsilon	υ
\varphi	φ
\phi	ϕ
\chi	χ
\psi	ψ
\omega	ω

The same goes on with BIG letters, such as ΓΔΘΛΞΠΣΥΦΨΩ, the only difference is as these are greek capital letters, so you have to write their codes' initial letter in CAPITAL mode.

\Gamma	Γ
\Delta	Δ
\Theta	Θ
\Lambda	Λ

\Xi	Ξ
\Pi	Π
\Sigma	Σ
\Upsilon	Υ

\Phi	Φ
\Psi	Ψ
\Omega	Ω

Basic Operators

a^b	a^b
a_b	a_b
a/b	$\frac{a}{b}$
\pm	$\pm$
\infty	∞
\neq	$\neq$
\times	$\times$
\div	$\div$
\propto	$\propto$
\ll	$\ll$
\gg	$\gg$
\leq	$\leq$
\geq	$\geq$

\mp	$\mp$
\cong	$\cong$
\approx	$\approx$
\equiv	$\equiv$
\forall	$\forall$
\sqrt	$\sqrt{}$
\cbrt	$\sqrt[3]{}$
\qdrt	$\sqrt[4]{}$
\partial	∂
\degree	°
\degf	°F
\degc	°C
\nabla	∇

\in	$\in$
\ni	$\ni$
\rightarrow	$\rightarrow$
\leftarrow	$\leftarrow$
\uparrow	$\uparrow$
\downarrow	$\downarrow$
\leftrightarrow	$\leftrightarrow$
\updownarrow	$\updownarrow$
\bullet	· vs .
\ldivide	/
\angle	$\angle$
\therefore	$\therefore$
\because	$\because$

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A Little More Operators

Some of the operators are a little bit more complicated. They are like these:

\int	$\int$
\iint	$\iint$
\iiint	$\iiint$
\oint	$\oint$
\oiint	$\oiint$
\oiiint	$\oiiint$
a\dot	$a\dot{}$
a\ddot	$a\ddot{}$

a\dddot	$a\dddot{}$
\partial a	∂a
\partial a/\partial b	$\frac{\partial a}{\partial b}$
3\ldivide4	$3 \backslash 4$
\int^a_b	$\int_a^b$
\Sigma_a^b	Σ_a^b

log_a b	$\log_a b$
min_a b	$\min_a b$
max_a b	$\max_a b$
lim_a b	$\lim_a b$

Examples

lim_(a\rightarrow\infty) a/n = 0; \forall a\in\doubleR	$\lim_{n\to\infty} \frac{a}{n} = 0;\ \forall a \in \mathbb{R}$
dX/dt=\mu_x X(1- X/X_m)	$\frac{dX}{dt} = \mu_m X \left(1 - \frac{X}{X_m}\right)$
X=X_m/(1+((X_m/X_0)-1)e^-\mu t)	$X = \frac{X_m}{1 + \left(\left(\frac{X_m}{X_0}\right) - 1\right) e^{-\mu t}}$
dS/dt=(dS/dt)_g+(dS/dt)_p+(dS/dt)_m	$\frac{dS}{dt} = \left(\frac{dS}{dt}\right)_g + \left(\frac{dS}{dt}\right)_p + \left(\frac{dS}{dt}\right)_m$

Homeworks!

$$\frac{dGA_3}{dt} = \beta X - k_p GA_3$$

$$\frac{dN_1}{dt} = 0.47k - \mu\left(\frac{X}{Y_{X/N_1}}\right)$$

$$X_n = \frac{Y_{\frac{X}{O}}.\Delta t\left[\frac{1}{2}\left(\frac{dO_2}{dt}_{t=0} + \frac{dO_2}{dt}_{t=n}\right) + \Sigma_{i=1}^{n-1}{}_{t=i}\right] + \left(1 - \frac{a}{2}\right).X_0 - a.\Sigma_{i=1}^{n-1}X_i}{1 + \frac{a}{2}}$$

Questions?

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Good luck dear colleagues!