

How to read Mathematical formulas

$$y'' + P(x)y' + Q(x)y = R(x)$$

y double prime (dash) plus P of x (times) y prime (dash) plus Q of x (times) y equals R of x.

$$\frac{\partial M(x, y)}{\partial y} = \frac{\partial N(x, y)}{\partial x}$$

d M of x (and) y by d y = d N of x (and) y by d x

$$y = y_g + y_p$$

y equals y (sub) g plus y (sub) p

$$\oint_C f(x) dx = 2\pi a_{-1}$$

*The integral around C of f of x d x equals two pi a
(sub) minus one*



$$f'(x_0) = \lim_{h \rightarrow 0} \frac{f(x_0 + h) - f(x_0)}{h}$$

f prime (dash) of x zero equals the limit as h tends to zero of f of x (sub) zero plus h minus f of x (sub) zero over h

$$b_n(x) \frac{d^n y}{dx^n} + \dots + b_1(x) \frac{dy}{dx} + b_0(x)y = g(x)$$

*b (sub) n of x (times) d n y by d x to the n plus dot
dot dot plus b (sub) one of x (times) d y by d x plus b
(sub) zero of x (times) y equals g of x*

N

N underline

\overline{N}

N over line

\geq

Greater than or equal

\Rightarrow

implies

\Leftrightarrow

implies and is implied (if and only if)