

MATHML EXAMPLES

$$\int_E (\alpha f + \beta g) d\mu = \alpha \int_E f d\mu + \beta \int_E g d\mu$$

$$\int_0^1 \frac{dx}{(a+1)\sqrt{x}} = \pi$$

$$A = \begin{pmatrix} 9 & 8 & 6 \\ 1 & 2 & 7 \\ 4 & 9 & 2 \\ 6 & 0 & 5 \end{pmatrix} \text{ or } A = \begin{bmatrix} 9 & 8 & 6 \\ 1 & 2 & 7 \\ 4 & 9 & 2 \\ 6 & 0 & 5 \end{bmatrix}$$

$$\begin{bmatrix} a_{11} - \lambda & \cdots & a_{1n} \\ \vdots & \ddots & \vdots \\ a_{n1} & \cdots & a_{nn} - \lambda \end{bmatrix} \begin{bmatrix} x_1 \\ \vdots \\ x_n \end{bmatrix} = 0$$

$$\sqrt{x^2} = |x| = \begin{cases} +x, & \text{if } x > 0 \\ 0, & \text{if } x = 0 \\ -x, & \text{if } x < 0 \end{cases}$$

$$H(j\omega) = \begin{cases} x^{-j\omega\sigma_0} & \text{for } |\omega| < \omega_\sigma \\ 0 & \text{for } |\omega| > \omega_\sigma \end{cases}$$

$$\sum_{n=0}^t f(2n) + \sum_{n=0}^t f(2n+1) = \sum_{n=0}^{2t+1} f(n)$$

$$\sqrt{x-3} + \sqrt{3x} + \sqrt{\frac{\sqrt{3x}}{x-3}} + i \frac{y}{\sqrt{2(r+x)}}$$

$$1 + \sum_{k=1}^{\infty} \frac{q^{k+k^2}}{(1-q)(1-q^2)\dots(1-q^k)} = \prod_{j=0}^{\infty} \frac{1}{(1-q^{5j+2})(1-q^{5j+3})}, \text{ for } |q| < 1$$

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