MathML

This chapter displays various types of mathematical formulas, using the JavaScript library MathJax to convert MathML to SVG. (A reduced version of MathJax 2.7.5 is included with this sample, under the Apache License 2.0) MathJax can be used without changing source documents via a user-script included in the PDFreactor package.

$$\int_0^1 \frac{\mathrm{d}x}{(a+1)\sqrt{x}} = \pi \qquad\qquad \int_E \left(\alpha f + \beta g\right) \mathrm{d}\mu = \alpha \int_E f \, \mathrm{d}\mu + \beta \int_E g \, \mathrm{d}\mu$$

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

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

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

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

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

$$H(j\omega) = \begin{cases} x^{-j\omega\sigma_0} & \text{for } |\omega| < \omega_\sigma \\ 0 & \text{for } |\omega| > \omega_\sigma \end{cases} \qquad x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$$

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

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