$$\boxed{}\; \blacksquare$$

Beautiful math in all browsers

TeX Samples

The following equations are represented in the HTML source code as LaTeX expressions.

The Lorenz Equations

$$\dot{x} = \sigma(y - x)$$
$$\dot{y} = \rho x - y - xz$$
$$\dot{z} = -\beta z + xy$$

The Cauchy-Schwarz Inequality

$$\left(\sum_{k=1}^{n} a_k b_k \right)^2 \le \left(\sum_{k=1}^{n} a_k^2 \right) \left(\sum_{k=1}^{n} b_k^2 \right)$$

A Cross Product Formula

$$\mathbf{V}_1 \times \mathbf{V}_2 = \begin{vmatrix} \mathbf{i} & \mathbf{j} & \mathbf{k} \\ \frac{\partial X}{\partial u} & \frac{\partial Y}{\partial u} & 0 \\ \frac{\partial X}{\partial v} & \frac{\partial Y}{\partial v} & 0 \end{vmatrix}$$

The probability of getting k heads when flipping n coins is

$$P(E) = \binom{n}{k} p^k (1 - p)^{n-k}$$

An Identity of Ramanujan

$$\frac{1}{\left(\sqrt{\phi\sqrt{5}} - \phi \right) e^{\frac{2}{5}\pi}} = 1 + \frac{e^{-2\pi}}{1 + \frac{e^{-4\pi}}{1 + \frac{e^{-6\pi}}{1 + \frac{e^{-8\pi}}{1 + \ldots}}}}$$

A Rogers-Ramanujan Identity

$$1 + \frac{q^2}{(1 - q)} + \frac{q^6}{(1 - q)(1 - q^2)} + \cdots = \prod_{j=0}^{\infty} \frac{1}{(1 - q^{5j+2})(1 - q^{5j+3})}\,, \qquad \text{for } |q| < 1.$$

Maxwell's Equations

$$\nabla \times \vec{\mathbf{B}} - \frac{1}{c}\ \frac{\partial\vec{\mathbf{E}}}{\partial t} = \frac{4\pi}{c}\vec{\mathbf{j}}$$

$$\nabla \cdot \vec{\mathbf{E}} = 4\pi\rho$$

$$\nabla \times \vec{\mathbf{E}} + \frac{1}{c}\ \frac{\partial\vec{\mathbf{B}}}{\partial t} = \vec{\mathbf{0}}$$

$$\nabla \cdot \vec{\mathbf{B}} = 0$$

Finally, while display equations look good for a page of samples, the ability to mix math and text in a paragraph is also important. This expression $\sqrt{3x-1}+(1+x)^2$ is an example of an inline equation. As you see, MathJax equations can be used this way as well, without unduly disturbing the spacing between lines.