## **Equations with LaTeX**

Dogs Inline Equations

Jax

Mathematical Equations

Online Tools Rendering

Mathematical equations may be created using LaTeX notation.

While editing a chapter, select Insert > LaTeX Equation (Block). In the resulting box, type your equation between the double-dollar signs.

```
Equation: $$E=mc^2$$
```

You can continue to edit the formula in the editor (provided that you do not remove the double-\$ symbols). When saved, the example equation will render like this:

$$E = mc^2$$

Here is a more sophisticated example:

Equation: \$\$S (\omega)=1.466\, H\_s^2 \, \frac{\omega\_0^5}{\omega^6 } \, e^[-3^ { \omega/(\omega\_0 )]^2}\$\$

Which will render like this:

$$S(\omega) = 1.466\, H_s^2\, rac{\omega_0^5}{\omega^6}\, e^{[} - 3^{\omega/(\omega_0)]^2}$$

## **Inline Equations**

Equations may be typed directly into text, such as  $E = mc^2$ , by placing them within slash parentheses. You can also insert an inline equation by right-clicking and choosing Insert > LaTeX Equation (Inline).

Equations may be typed directly into text, such as \(E=mc^2\) by placing them within slash parentheses. Example of an inline text input

## **Multi-Line Equations**

For multi-line equations, you must encapsulate your equation in a \displaylines{} function and separate each line with a double-slash:

```
Equation: \ \ \displaylines{f(x) = x^2 \\ g(x) = \frac{1}{x} \\ F(x) = \int^a_b \frac{1}{3}x^3} $
```

$$egin{aligned} f(x) &= x^2 \ g(x) &= rac{1}{x} \ F(x) &= \int_b^a rac{1}{3} x^3 \end{aligned}$$

If you need assistance writing LaTeX equations, there are many online tools that can help you do this such as the <u>Online</u> <u>LaTeX Equation Editor</u>.

All rendering is performed courtesy of <u>MathJax</u> and <u>CodeDogs</u>.



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