Simple Latex Test

Here's some equations:

$$y = mx + c$$

$$\beta = 5x^{3} + y^{(1/8)} - \sqrt{z} + \frac{3}{4}\pi$$

$$\sigma = \sqrt{\frac{1}{N-1} \sum_{i=1}^{N} (x_{i} - \overline{x})^{2}}$$

$$\pm \infty \neq \sim \infty \quad 7!$$

$$\otimes \bigoplus \cap \cup$$

$$\supset \subseteq \supseteq$$

$$\int \oint \sum \prod$$

Subscript & superscript test

$$\int_{0}^{1} x^{2} + y^{2} dx$$

$$[a_{1}^{2} + a_{2}^{2} = a_{3}^{2}]$$

$$x^{2\alpha} - 1 = y_{ij} + y_{ij}$$

$$(a^{n})^{r+s} = a^{nr+n}$$

$$\sum_{i=1}^{\infty} \frac{1}{n^{s}} = \prod_{p} \frac{1}{1 - p^{-s}}$$

$$\sqrt[4]{4ac} = \sqrt{4ac\sqrt{4ac}}$$

$$a_{n_{i}} \cup_{i=1}^{n} \prod_{i=1}^{n} \mathcal{E}$$