Mathematics with Lucida Bright Demibold

First some large operators both in text: $\iiint\limits_{\mathscr{Q}} f(x, y, z)\, dx\, dy\, dz$ and $\prod_{y \in \Gamma_{\tilde{c}}} \partial(\tilde{X}_y)$; and also on display:

$$\iiiint\limits_{Q} f(w, x, y, z)\, dw\, dx\, dy\, dz \leq \oint_{\partial Q} f' \left(\max \left\{ \frac{\|w\|}{|w^2 + x^2|} ; \frac{\|z\|}{|y^2 + z^2|} ; \frac{\|w \oplus z\|}{\|x \oplus y\|} \right\} \right)$$

$$\lessapprox \biguplus_{\mathbb{Q} \in \tilde{Q}} \left[f^* \left(\frac{\mathbb{Q}(t)}{\sqrt{1 - t^2}} \right) \right]_{t = \alpha}^{t = \vartheta} - (\Delta + \nu - \upsilon)^3 \tag{1}$$

For x in the open interval $]{-1}, 1[$ the infinite sum in Equation (2) is convergent; however, this does not hold throughout the closed interval $[-1, 1]$.

$$(1 - x)^{-k} = 1 + \sum_{j=1}^{\infty} (-1)^j \begin{Bmatrix} k \\ j \end{Bmatrix} x^j \quad \text{for } k \in \mathbb{N};\ k \neq 0. \tag{2}$$