klarTeXt Test File

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Arithmetic

Integrals

$$\int_{-5}^{5} \Theta(x)\,dx = 5.000000000000002$$

$$\int_{0}^{\pi} \sin(x)\,dx = 2.0000000000017906$$

$$\int_{0}^{\pi} \int_{0}^{\pi} y\sin(x)\,dx\,dy = 9.869604401098199$$

$$\int_{1}^{3} \int_{2}^{4} 9x^3 y^2\,dy\,dx = 3360.0000000000036$$

$$\int_{0}^{1} \int_{x^2}^{x} x + 3\,dy\,dx = 0.5833333333333337$$

$$\frac{7}{12} = 0.5833333333333334$$

Sums

$$\sum_{i=1}^{5} \exp(i) = 233.2041839862982$$

$$\sum_{i=1}^{10} \ln(i) = 15.104412573075518$$

$$\ln(10!) = 15.104412573075516$$

$$\sum_{i=0}^{3} \cos\left(\frac{\pi i}{2}\right) = 0$$

$$\sum_{i=1}^{4} i\sin\left(\frac{\pi}{i+1}\right) = 7.204512160298412$$

$$\sum_{i=1}^{3} \log(i+e) = 2.00139173839899$$

$$\sum_{i=0}^{4} \frac{\pi^i}{i!} = 18.30281976060121$$

$$\sum_{i=1}^{5} \Theta(i-3) = 2.5$$

Products

$$\prod_{i=1}^{5} i = 120$$

$$\prod_{i=1}^{4} \exp(i) = 22026.465794806714$$

$$\prod_{i=0}^{3} \cos\left(\frac{\pi i}{2}\right) = 0$$

$$\prod_{i=1}^{4} \sin\left(\frac{\pi}{i+1}\right) = 0.3599434866124088$$

$$\prod_{i=1}^{3} \ln(i + e) = 3.552642204172372$$

$$\prod_{i=0}^{3} \frac{\pi^i}{i!} = 80.11576613127535$$

Infinity and Beyond

$$-5 \cdot \infty = -\infty$$

$$\frac{5}{0} = \infty$$

Special Functions

$$\Gamma(4+1) = 24$$
$$\Phi(0) = 0.5$$
$$\arcsin\left(1/2\right) = 0.5235987755982989$$