

Some integrals

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8:40 PM

$$\int_{-\infty}^{\infty} F(x) dx := \lim_{\lambda \rightarrow \infty} \int_{-\infty}^{\infty} F(x) e^{-x^2/2\lambda} dx$$

$$\int_{-\infty}^{\infty} e^{i\alpha x^2} dx \sim e^{i\frac{\pi}{4} \text{sign}(\alpha)}$$