F(n)=
$$\int_{-\infty}^{\infty} f(t) dt + \int_{-\infty}^{\infty} f(t) dt$$
.

F(n)= $\int_{-\infty}^{\infty} e^{t} dt = -\frac{t}{e} \Big|_{=-e+1}^{\infty}$.

Here

 $F(n)=\int_{-\infty}^{\infty} e^{t} dt = -\frac{t}{e} \Big|_{=-e+1}^{\infty}$.