Show that
$$\int_{-\infty}^{\infty} \frac{1}{(x^2+1)^3} \ dx = \frac{3\pi}{8}$$

$$\frac{1}{f}(2) = \frac{1}{(2^{2}+1)^{2}} dx$$

$$\frac{1}{f}(2) = \frac{1}{(2^{2}+1)^{2}} \int_{1}^{1} \rho r(0) dx + 1 - 0 \Rightarrow 2 = \frac{1}{2}$$

$$\frac{1}{g} = \frac{1}{f} \int_{1}^{1} \rho r(0) dx + 1 - 0 \Rightarrow 2 = \frac{1}{2}$$

$$\frac{1}{g} \int_{1}^{1} \frac{1}{(2^{2}+1)^{3}} dx = 2\pi i \cdot \frac{1}{2} \int_{1}^{1} \frac{1}{(2^{2}+1)^{2}} \int_$$