

$$\int \frac{x+5}{x^2+1} dx =$$

INT-S1-009

$$= \int \frac{x}{x^2+1} + \frac{5}{x^2+1} dx =$$

$$= \frac{1}{2} \int \frac{2x}{x^2+1} dx + 5 \int \frac{1}{x^2+1} dx =$$

$$= \frac{1}{2} \ln(x^2+1) + 5 \operatorname{arctg} x + k$$