# Problems - Sections 78, 79

Evaluate the following integrals.

(1)
$$\int_0^\infty \frac{dx}{x^2 + 1}$$

(2)
$$\int_0^\infty \frac{dx}{(x^2 + 1)^2}$$

(3)
$$\int_0^\infty \frac{dx}{x^4 + 1}$$

(4)
$$\int_0^\infty \frac{x^2 dx}{(x^2 + 1)(x^2 + 4)}$$