Problem 1: (10 points) Find the area between the curves \( y = x^2 - 1 \) and \( y = 1 - x^2 \) from \( x = -1 \) to \( x = 2 \).

Problem 2: (15 points) Evaluate the integrals:

(a) \( \int \frac{e^x}{1+e^{2x}} \, dx \)

(b) \( \int_1^e \frac{dx}{x + x \ln x} \)

(c) \( \int \frac{2^{x+1}}{3^{2x}} \, dx \)