## Mathematics 1220 Calculus II, Examination 2, Feb 12, 14, 2004

Find all the integrals. Remember that definite integrals should have numerical answers. You MUST show your work.

$$1a. \qquad \int (x+1)x^{12}dx$$

$$1b. \qquad \int \ln(x^2) dx$$

$$2. \qquad \int \frac{dx}{x^2(x+2)}$$

$$3. \qquad \int_0^2 \frac{x}{1+x^4} dx$$

$$4. \qquad \int x(\sin x)dx$$

$$\int_{2}^{4} \frac{dx}{x(x-1)}$$