This is a take-home quiz. You might want to review the techniques of *Integration by Parts* and *Partial Fractions* from your Calculus book (so the quiz is also open book). **Be sure to show your work!**

DUE: Monday

Evaluate the following integrals (Use additional paper to show your work):

$$1. \int \frac{x^2}{x+1} \, dx$$

$$2. \int x^3 e^{2x} dx$$

3.
$$\int \frac{1}{(t+4)(t-1)} dt$$

4.
$$\int \cos(\ln(x)) dx$$

5.
$$\int e^{2x} \cos(3x) dx$$

$$6. \int \sin^{-1}(x) \, dx$$