Section 004 of Calculus Lab 2,   Name (clearly printed): _____
Quiz of January 31, 2003 (Friday)
10:00-10:15 a.m.   ID #: _____

1. Carefully print a MATHEMATICA Input command or commands for the evaluation of

$$\lim_{x \to 0} \frac{24\cos(x^5) + 24\cos(x^7) - 48 + 12\,x^{10} + 12\,x^{14} - x^{20} - x^{28}}{x^{20}}.$$

2. For the function defined by $f(x) = x^2 e^x$, for any real number x, write a MATHEMATICA Input statement that will plot the seventh derivative $f^{(7)}(x)$ of $f(x)$ over the interval $-6 \leq x \leq -4$.

(End of Quiz)