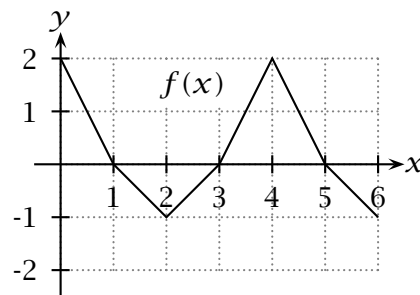| MA 126-02 §5.4–5.6	**Quiz #1** *score*	**Name:** _____ 9 June 2000

1. If $f(x)$ is a function with $4 \le f(x) \le 6$ for each x in the interval $[2,4]$, find upper and lower bounds for the value of $\int_2^4 f(x)\,dx$. *(4 points)*

2. The graph to the right shows a function f. Let $g(x) = \int_0^x f(x)\,dx$. At what values of x does g have relative extrema? inflection points? Explain. *(6 points)*

3. Evaluate the following integrals by hand. Show your work. Check your answers using your calculator if you like. *(5 points each)*

(a) $\displaystyle \int \frac{x+1}{(x^2+2x)^3}\,dx$

(b) $\displaystyle \int_1^2 x \ln x \,dx$