AP Calculus BC Name:

7'.1 Do Now

Suppose the Maclaurin series for some function $f(x)$ is given by

$$1+2x+\frac{3x^2}{2}+\frac{4x^3}{6}+\ldots+\frac{(n+1)x^n}{(n)!}+\ldots$$

Find $f''(0)$.	Let $q(x) = xf(x)$. Write the first four terms and the general term for the Maclaurin series for $q(x)$.
Let $g(x) = xf'(x)$. Write first four terms and the general term for the Maclaurin series for $g(x)$.	Let $h(x) = \int_0^x f(t)\,dt$. Write the first four terms and the general term for the Maclaurin series for $h(x)$.