1. Find the first five Taylor coefficients for $\log(x)$ at $x = 1$:

n	0	1	2	3	4	5
$f^{(n)}(x)$	$\log(x)$					
$f^{(n)}(1)$						
$C_n = \frac{f^{(n)}(1)}{n!}$						

Write the first five terms of the Taylor series:

2. Use your series to approximate $\log(0.9)$.

3. Use Newton's trick that $2 = \frac{(1.2)^2}{(0.9)(0.8)}$ to calculuate $\log(2)$ using values of $\log(0.9)$, $\log(0.8)$, $\log(1.2)$ that you compute from the series in question 2.