(a) Use the method of substitution to find the following indefinite integral. Be sure to indicate the substitution you use.
\[ \int \frac{1}{x \ln x} \, dx \]

(b) Use the method of substitution to evaluate the following definite integral. Be sure to indicate the substitution you use.
\[ \int_{0}^{1} x^2 e^{x^3} \, dx \]