Directions: Please show all the work leading to your answers. Having some correct work with an incorrect answer will earn you partial credit.

1. Evaluate the following integral
   \[ \int_2^3 \frac{dt}{1-t} \]

2. Evaluate the following integral
   \[ \int \frac{\ln(x^5)}{5x} \, dx \]
   Use \( C \) for the constant of integration.