Please show **all** your work! Answers without supporting work will not be given credit. Write answers in spaces provided.

Name:_____

1. [**4 pts**] Solve for y as a function of t when $y' = 20 \ln t$.

Answer:_____

2. [**6 pts**] Consider the following IVP: $\dfrac{dy}{dx} = 11x^2 e^{-x^3}$ where $y = 10$ when $x = 2$. Find the value of the integration constant, C.

Answer:_____