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

Name:\_

1. [4 pts] Compute  $\int 5 \cot \left(\frac{x}{8}\right) dx$ 

Answer:\_\_\_\_

2. [3 pts] Compute  $\int \frac{1}{x \ln(x^{19})} dx.$ 

Answer:\_\_\_\_\_

3. [3 pts] Compute  $\int \frac{4(\ln(x))^3}{x} dx.$ 

Answer:\_\_\_\_