

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

Name: \_\_\_\_\_

1. [5 pts] Compute  $\int 5 \cot(8x) dx$

*Hint: Rewrite  $\cot(8x)$  with a trigonometric identity.*

$$\int 5 \cot(8x) dx = \underline{\hspace{4cm}}$$

2. [5 pts] Compute  $\int \frac{4(\ln(5x))^3}{x} dx$ .

$$\int \frac{4(\ln(5x))^3}{x} dx = \underline{\hspace{4cm}}$$