

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

Name: _____

1. [4 pts] What would be the best substitution to make to solve the given integral?

$$\int 3e^{3x} \cos(e^{3x}) \sin^5(e^{3x}) dx$$

$u =$ _____

2. [6 pts] Compute $\int \frac{9x}{\sqrt{3x+1}} dx$

$$\int \frac{9x}{\sqrt{3x+1}} dx = \text{_____}$$