No graphing calculators are allowed on this quiz. Please read each question carefully, follow directions and clearly mark your solutions. Show your work for full credit and circle your name to get 2 extra credit points.

1. (5 points) Evaluate

$$\int_0^1 8x(x^2+1)^3 \, \mathrm{d}x$$

2. (5 points) Find the area of the region bounded by y = 9x and $y = x^3$.