

Name _____

Do the following problems by hand showing all necessary work. You may use Maple or a calculator only to check your work or do simple arithmetic.

1. (6 points) Evaluate the following integrals.

(a) $\int_2^{\infty} 5xe^{-x} dx$

(b) $\int_1^4 \frac{dx}{(x-1)^{3/2}}$

2. (4 points) Find the area of the region under the curve $y = \frac{1}{x^3}$ to the right of $x = 2$.