## Quiz 2a Calculus $2 \quad$ 2/9/04

Each problem is worth 5 points. For full credit provide proper justification for your answer.

1. Find the value of $\int_{0}^{\infty} \frac{x}{e^{x}} d x$ or show that it diverges.
2. Find the area of the region bounded between $y=2 x$ and $y=x^{2}-3$.
