

**NAME:**

MATH 107 Quiz 4  
February 2, 2007

1. Use Simpson's rule with  $n = 6$  to approximate the value of  $\int_0^\pi 4 \sin^2 \theta \, d\theta$ . Give an upper bound for the error of this approximation.

2. Evaluate  $\int_0^\infty x e^{-x} \, dx$ .