

**Math 152 Quiz #6**  
**February 17, 2010**

Name: \_\_\_\_\_

Show all work on a separate sheet. Put a box around your final answer. No calculators are permitted.

1. (5 pts.) Find the area between  $y = \frac{\ln x}{x^2}$  and the  $x$ -axis for  $1 \leq x \leq e$ .

2. (5 pts.) Evaluate  $\int \frac{5x^3}{\sqrt{4-x^2}} dx$  using trigonometric substitution.