

Name _____

Homework 35
section 6.2

1. (4) Find the indefinite integral $\int (t^9 + \pi) dt$.

2. (6) Calculate the exact area between the graphs of $f(x) = \sin(x)$ and $g(x) = \cos(x)$ for $0 \leq x \leq \pi/4$.

3. (4) Find the indefinite integral $\int \left(\frac{1}{x} - \sqrt{x} \right) dx$.

4. (6) The average value of the function $v(x) = \frac{8}{x^2}$ on the interval $[1, c]$ is equal to 2. Find the exact value of c .