408L CLASS PROBLEMS

Problem 1. Find $\int \sin^2(x)\cos(x)dx$.

Problem 2. Find $\int \cos^3(x)dx$.

Problem 3. Find $\int \cos^2(x)dx$.

Problem 4. Find $\int \sin^2(x)\cos^2(x)dx$.

Problem 5. Find $\int \frac{\sin(x)}{\cos^3(x)}dx$.

Problem 6. Find $\int \frac{\sin^3(x)}{\cos^3(x)}dx$.