

## RECITATION 5

NAME:

**Problem 1.**  $\int_0^{\pi/3} \frac{\cos^2 x}{\sqrt{1+\sin x}} dx$

**Problem 2.**  $\int \sec^3(4x) \tan(4x) dx$

**Problem 3.**  $\int_0^{\pi/4} \frac{4 \cot^2(x)}{\csc^2(x)} dx$  (try to see if there is any direct simplification without any use of identities)

**Problem 4.**  $\int \frac{dx}{\sqrt{36+x^2}}$

**Problem 5.**  $\int \frac{x^2 dx}{\sqrt{9-16x^2}}$

**Problem 6.**  $\int \frac{(x^2-4)^{3/2}}{x} dx$