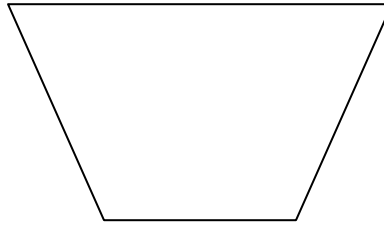


Math 181  
Fall, 2009

Name \_\_\_\_\_

Homework #5  
Due Monday September 7  
No late papers accepted! No excuses!

1. Find the fluid force on the vertical side of the tank, where the dimensions are given in feet. Assume that the tank is full of water and that the density of water is 62.4 pounds per cubic foot.



2. Find each derivative.

a)  $f(x) = \arctan(\sinh x)$

b)  $y = x^{\cosh x}$

2. Evaluate  $\int \cosh^2 x dx$