Present neatly on separate paper. Justify for full credit. No Calculators.
Name _____Score _____ 12 minutes **Weight: 1**

1) The base of a solid is the region enclosed by y = cos x , y = sin x and y = 0 in the first quadrant. Known cross sections are rectangles perpendicular to the horizontal axis, with length equal to twice the width. The width side sits on the base. Find the volume.

2) Use the limit definition to find the integral $\int_{-2}^{-1}(x+3)(x-1)\,dx$. Show work leading to your answer.