Calculus III. F15 Quiz 9. Name _____ Time_____
Show all work for full or partial credit. Put a box around your final answer in each part.

1. Set up one triple integral of the function $f(x, y, z) = \sin(xy + z)$ over the tetrahedron with vertices $(0, 0, 0)$, $(1, 1, 0)$, $(0, 3, 0)$ and $(0, 3, 3)$.

   Make sure to set it up so that it can be integrated (constants on the leftmost integral!) BUT you don't have to integrate, just set up the triple integral.

2. Find the integral $\displaystyle\int_{-5}^{0} \int_{-\sqrt{25-x^2}}^{0} \int_{0}^{2} e^{(x^2+y^2)} \, dz \, dy \, dx.$

   First show the set up of the integral, using cylindrical coordinates, then evaluate.