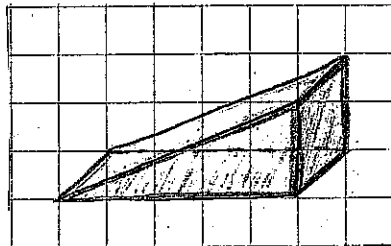


Math 2 Winter 2006 Project 2

Names of Group Members: _____

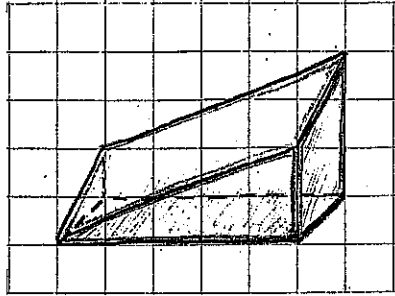
1. Describe a solid that is not a solid of revolution (i.e. a solid that can't be created by rotating some region about an axis). How can you tell the difference between such an object and a solid of revolution?

2. Consider the following solid. Can you think of a way to find its volume?



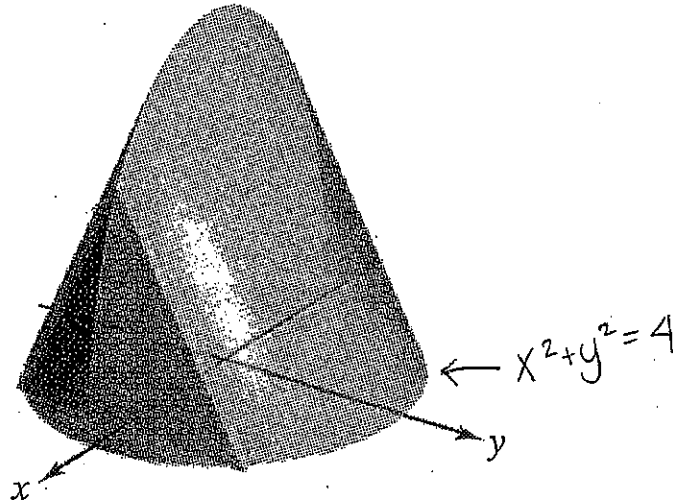
Math 2 Winter 2006 Project 2

3. Consider the following more complicated picture. How might you find its volume?

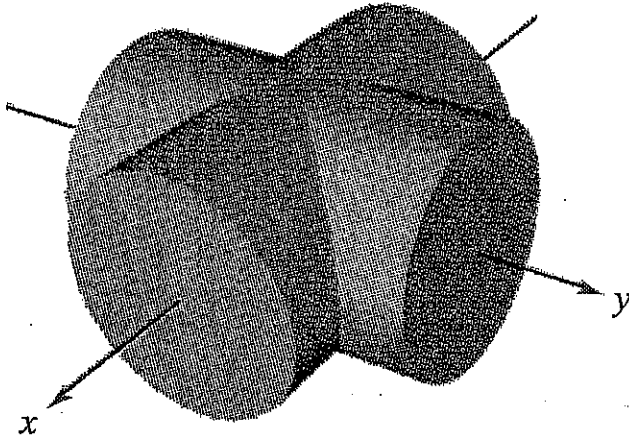


4. Could you generalize your method to find the volume of the following object?

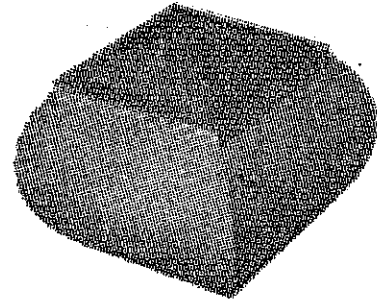
Equilateral triangles



5. Can you think of a way to use your method in order to find the volume of the intersection of two cylinders, as shown in the following picture? (Note that the cylinders have equal radii and intersect at a right angle.)



Two intersecting cylinders



Solid of intersection