Name: _____

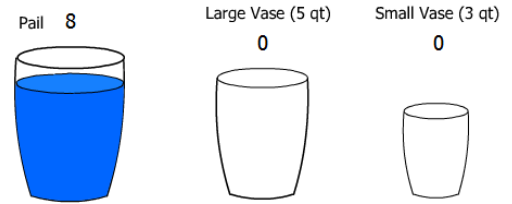## Class Notes/Activity
Using Graph Theory to Model Systems

The Water Puzzle

Instructions: Starting with a pail containing 8 quarts of water and small (3-quarts full) and large (5-quarts full) vases as measuring devices, you are to split the water in the pail equally between two people. Thus there must be 4 quarts of water in the pail and 4 quarts of water in the 5 quart vase at the end of the puzzle.

Pail **8**

Large Vase (5 qt)
0

Small Vase (3 qt)
0

What is the *minimum* number of pours required to achieve the goal of 4 quarts of water in each pail?