

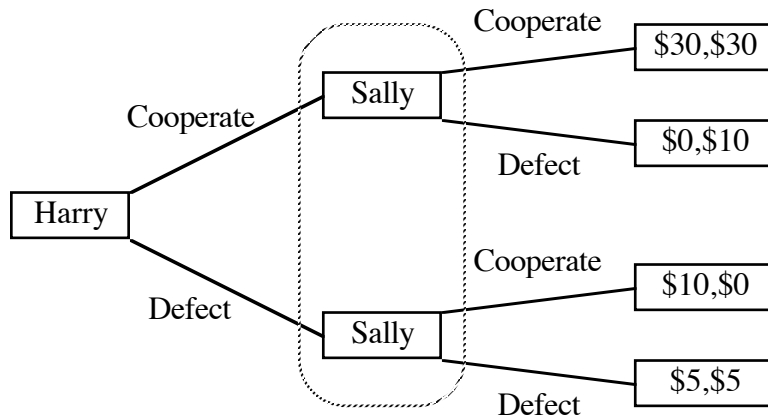
# Exercise 6

INR 3303: Foreign Policymaking

Name:

Due: November 17, 2005

For problem 1, consider the following diagram, in which payoffs are given on the right side in the order (Harry, Sally):



1. In this game, there are no dominant strategies (it's a version of "stag hunt"). Suppose Harry believes that there's only a 10% chance that Sally will cooperate (a 90% chance she'll defect).
  - a. What is Harry's expected utility if he cooperates? What is his expected utility if he defects? **(Show both utility equations).**

If Harry cooperates:

If Harry defects:
  - b. What should he do?
  
2. Calculate the optimal mixed strategy for the Dolphins offense in the following problem, which shows the number of yards Miami will gain (and Dallas will lose) on average from various combinations of strategies (**show all work, using the back of this page if necessary for your expected utility equations**):

|                |      |                |         |
|----------------|------|----------------|---------|
|                |      | Dallas Cowboys |         |
|                |      | Blitz          | Prevent |
| Miami Dolphins | Run  | 2, -2          | 8, -8   |
|                | Pass | 6, -6          | 4, -4   |