1. It's the end of term and Paul and Jeanette have a group assignment to do. Jeanette is very concerned about her grades, and Paul is less so. They each have the choice to either slack off or work hard on the assignment, and their combined efforts will result in a good grade. The payoffs to each are shown in the static game below as (Paul's Payoffs, Jeanette's Payoffs).

Jeanette's Choices

(0,-2)

Work hard Slack off Work hard (4,5)(1,0)Paul's Choices Slack off

- a) Does Jeanette have a dominant strategy?
- b) Does Paul have a dominant strategy?
- c) What is/are the pure strategy Nash equilibrium/equilibria in this game?

(5,3)

- d) Explain why each of the non-Nash equilibria (if any) nodes are not Nash equilibria
- e) If they repeat this game indefinitely, is a strategy where each does next period what the other did this period a Nash equilibrium strategy?
- f) Does the Nash equilibrium maximize their joint payoffs?

2) In the extensive form game where Paul reveals his share of the work first, and Jeanette has to decide whether or not to do enough work to fix it, is the equilibrium the same as in the static, simultaneous move game?

