## **ECONOMICS 122 – GAME THEORY** Professor Giacomo Bonanno

## HOMEWORK # 2 ANSWERS

(a) Yes, any x > 6 (and only those values of x). The strategy is A.

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- (**b**) No, because if player 1 plays A the payoff of player 3 is the same (namely 2) no matter what strategy player 3 chooses.
- (c) Yes (F,D) is weakly dominated by (G,D) and (F,E) is weakly dominated by (G,E).
- (d) For  $y \neq 2$  (and only those values of y): if y > 2 then H weakly dominates L and if y < 2 then L weakly dominates H.
- (e) Four: (*F*,*D*), (*F*,*E*), (*G*,*D*) and(*G*,*E*).
- (f) One solution is (A, (G,E), H) and the other is (B, (G,D), L).
- (g) (A, (G,E), H).
- (h) Because it is not a strategy profile.
- (i) Again, because it is not a strategy profile.
- (j) Yes: (A,(G,E),H) and also (A,(G,E),L) and (A,(G,D),H).