NAME:

(1)/(2) X Y Z (1)/(2) X Y Z
U (3,1,3) (3,3,1) (1,-1,1) U (1,1,3) (-2,2,1) (3,2,2)
D (2,-1,3) (3,1,2) (-2,0,2) D (-1,3,3) (1,2,2) (1,-2,2)
L (3) R

(a) Is the game above weak dominance solvable? Explain each step.

(b) Find all pure strategy Nash equilibria, if any.

ANSWER:

(a) The game is NOT weak dominance solvable.

Step 1. For player 2, Z is weakly dominated by Y. For player 3, L is weakly dominated by R. Eliminate both. Reduced game is

(1)/(2) X Y
U (1,1,3) (-2,2,1)
D (-1,3,3) (1,2,2)
R

(b) The set of Nash equilibria is \{ (U, Y, L), (D, Y, L), (U, Z, R) \}. 

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