My name:				

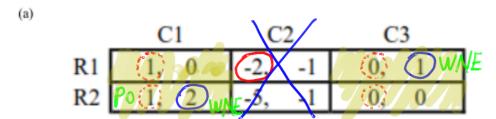
## ISCI 344 "Game Theory" In-class Worksheet –IESDS

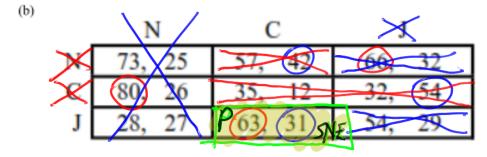
Let's practice some of the solution concepts we learned about for payoff matrices (normal form games). In particular, let's apply:

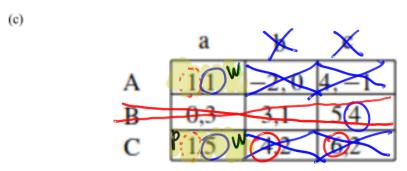
- Iterated Elimination of Strictly Dominated Strategies (IESDS)
- Nash equilibria
- · Pareto improvement and Pareto optimality

For each of the following matrices,

- 1. Apply IESDS to simplify the matrix as much as possible.
- Find all Nash equilibria (strict and weak)
- Looking at the full matrix, are there any outcomes that would be mutually
  preferred over the Nash equilibria? (Pareto improvements?) You are not required
  to find all Pareto optima in the full matrix.
- 4. What strategy would you play if you were the row player, and why? Column player?







(d)

	a	b /	c	$\nearrow$	$\nearrow$
$\rightarrow$	63,/-1	28, -1	<u>-2, 0</u>	2, 45	3, 19
В	32 1	2, 2	(2) (5) <sub>S</sub>	(33) (V	(2) 3
	5 <mark>4, \</mark> 1	(95), -1	0, 2	4, 1	0, 4
$\nearrow$	1, -33	-3, (43)	-1, 39	1, -12	-1, 17,
$\searrow$	/-22, 0	J, -13		,2,57	3,72

