

Name: _____

Economics 431 Quiz #1

Amy and Beth are competing sellers. Their price competition can be described by the following game, which is derived from the demand curve $Q = 6 - p$, where p dollars per unit is the lowest price, and where the game's payoffs represent the sellers' daily profits, in thousands of dollars.

		Beth's Price			
		\$1	\$2	\$3	\$4
Amy's Price	\$1	2.50, 2.50	5.00, 0	5.00, 0	5.00, 0
	\$2	0, 5.00	4.00, 4.00	8.00, 0	8.00, 0
	\$3	0, 5.00	0, 8.00	4.50, 4.50	9.00, 0
	\$4	0, 5.00	0, 8.00	0, 9.00	4.00, 4.00

(a) Is Amy's strategy \$4 strongly dominated? Yes If so, indicate which strategy(s) strongly dominate \$4.

\$1

(b) Is Amy's strategy \$4 weakly dominated? Yes If so, indicate which strategy(s) weakly dominate \$4.

\$2 and \$3, and also \$1 (strong domination implies weak)

(c) Are any of Amy's strategies undominated? Yes If so, which ones?

\$1, \$2, and \$3

(d) Does the game have a dominant-strategy solution? No If so, what is the solution/prediction? (That is, what choices will the players make?)

(A strategy is dominant for a player if it dominates, at least weakly, every one of his other strategies.)

(d) Under Iterated Elimination of Strongly Dominated Strategies does the game have a solution? Yes If so, what is the solution/prediction?

(\$1, \$1) – i.e., each player chooses \$1