$\qquad$

## Economics 431 <br> 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 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | \$1 | 2.50, 2.50 | 5.00, 0 | 5.00, 0 | 5.00, 0 |
| Amy's <br> Price | \$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? $\qquad$ If so, indicate which strategy(s) strongly dominate \$4.
(b) Is Amy's strategy $\$ 4$ weakly dominated? $\qquad$ If so, indicate which strategy(s) weakly dominate $\$ 4$.
(c) Are any of Amy's strategies undominated? $\qquad$ If so, which ones?
(d) Does the game have a dominant-strategy solution? $\qquad$ If so, what is the solution/prediction? (That is, what choices will the players make?)
(e) Under Iterated Elimination of Strongly Dominated Strategies does the game have a solution? $\qquad$ If so, what is the solution/prediction?

