3. In the local market for Good X, there are four individual buyers: Emily, Wu, Omar, and Fernanda. The quantities that each individual buyer would be willing and able to purchase at different prices are included in the table provided.

	Quantity of Good X			
Price	Emily	Wu	Omar	Fernanda
\$1	5	4	4	3
\$2	4	3	4	3
\$3	4	3	3	2
\$4	3	2	3	2
\$5	3	2	2	1
\$6	2	1	2	1
\$7	2	1	1	0
\$8	1	0	1	0

(a) The local market for Good X has a perfectly elastic supply. Draw a correctly labeled graph for the local market for Good X with a market equilibrium price of \$5. Label the equilibrium price as \$5, and label the equilibrium quantity for the market with a specific value based on the data provided in the table.

(b) Assume the cost of production increases, which causes the price of Good X to increase from \$5 to \$7.

(i) Calculate the price elasticity of demand for Good X as the price increases from \$5 to \$7. Show your work.

(ii) Identify whether the demand for Good X is elastic, inelastic, or unit elastic in that range of prices.

(c) Could Emily's marginal benefit for the second unit of Good X equal \$4.50 ? Explain.

Begin your response to this question at the top of a new page in the separate Free Response booklet and fill in the appropriate circle at the top of each page to indicate the question number.

STOP

END OF EXAM