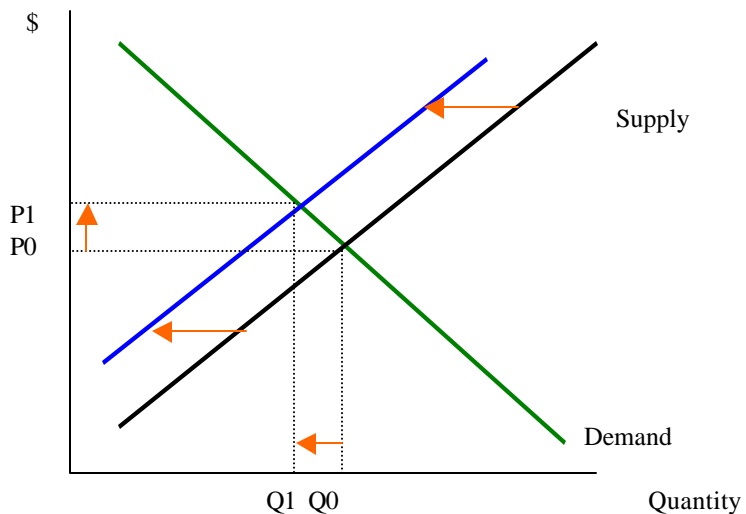


Name: _____

Recent increases in the price of crude oil have been linked to the significant rise in retail gasoline prices. For example, in Northfield, regular gasoline at the pump has increased from an average of about \$1.30 per gallon to about \$1.50 per gallon in the past month.

(a) Use a supply and demand graph to show the connection between the rise in crude oil prices and the rise in retail prices for gasoline. Be sure to explain what is going on, and why, in the graph.

An increase in crude oil prices decreases supply (shifts it to the left) because crude oil is an input or factor in the production of gasoline. A decrease in supply causes a decrease in quantity demanded and an increase in price, *ceteris paribus*.



(b) Suppose that the average car owner purchased 15 gallons of gas per week before the price increase. Now that gas is \$1.50 per gallon, the average car owner purchases 14 gallons per week. Use the concept of consumer surplus to estimate how much worse off the average car owner is because of the price increase. Use a graph if it is helpful.

The change in consumer surplus is a measure of how much worse off the consumer will be. Graphically, the change is shown. Its area is the measure of loss to the consumer. In this case, the loss is equal to $\Delta CS = (1/2)(15+14)(\$0.20) = \$2.90$ (per week).

