Assessment 4: 7AM-9AM Test
Questions and Solutions

Q1. [24 points] "Drug ABC" is a common pain-relieving medication with many uses. Assume it is a perfectly competitive market with identical firms. A new study finds that "Drug ABC" is not effective for the elderly population.

a. [7 points] What is the SHORT-run impact of this new finding on the market (price, quantity and no. of firms) and firms (quantity and profit)? Explain your reasoning.

Solution: A fall in the effectiveness will reduce the valuation of the drug for the elderly population, reducing their MWTP and hence reducing their demand. This will cause a fall in market demand. In the short-run the number of firms is fixed, so we move along the short-run market supply curve and prices will fall.

Firms will move along their MC curve and produce a lower quantity given the lower market price. As long as this price is above min AVC they will produce, but their profits will be negative in the short run.

b. [7 points] What is the LONG-run impact of this new finding on the market (price, quantity and no. of firms) and firms (quantity and profit)? Explain your reasoning.

Solution: In the long run negative economic profits will cause firms to exit the market. This exit of firms will cause supply to decrease and push prices up. Market quantity will decrease. Prices rise back up to the min ATC at which point firms will make zero profits. As firms