

Workout Book Problems:

22.3,22.8,23.1,23.2,23.7,23.9,24.7

1. *Ten* firms have cost function $c(q) = q^2 + 10q + 100$. They are price-takers.
 - A) What is the firms' average total cost function?
 - B) What is the firms' average variable cost function?
 - C) What is the minimum of average variable cost?
 - D) What are the firms supply and inverse supply functions?
 - E) Below what price will a firm produce 0?
 - F) Above what price can these firms earn positive profit?
 - G) How much does each firm produce at price p ?
 - H) What is the market supply at price p ?
 - I) If demand is given by $Q_d = \frac{500}{p-10}$ what is the equilibrium price when there are 10 firms?
 - J) How much does each firm produce?
 - K) What are the firms profits in equilibrium?