You MUST SHOW YOUR WORK clearly either in the margins or on an attached sheet of paper for complete credit.

A. Market Power (40 pts) The market for widgets is:  
\[ P: \ 28 \quad 56 \quad 84 \ \text{etc.,} \quad \frac{dP}{dQ} = -\frac{\delta}{28} = \frac{-7}{2} \]
\[ Qd: \ 18 \quad 14 \quad 10 \ \text{etc.,} \quad \frac{dQd}{dP} = \frac{14}{2} = \frac{7}{2} \]
\[ Qs: \ 9 \quad 23 \quad 37 \ \text{etc.,} \quad \frac{dQs}{dP} = \frac{14}{2} = \frac{7}{2} \]

1. \[ Qd = -\frac{1}{2}P + 22 \]
What is the equation for the demand curve (Qd=f(P))? 

2. \[ Qs = \frac{1}{2}P - 5 \]
What is the equation for the supply curve (Qs=f(P))? 

3. \[ P = 42, \quad Qd - Qs = 16 \]
What is equilibrium P and Q? 

4. \[ \frac{d}{dQ}(\frac{10 + \sqrt{Q}}{6}) = 4/6 \]
What are the cost at equilibrium? 

5. \[ MR = 154 - 14Q \]
What is the equation for the marginal revenue curve (MR=f(Q))? 

6. \[ MC = 10 + 2Q \]
What is the equation for the marginal cost curve (MC=f(Q))? 

7. \[ Q = 9 \]
What is the Q that maximizes producer surplus? 

8. \[ P = 91 \]
What is the P which maximizes producer surplus? 

9. Draw a rough diagram, clearly showing equilibrium (#3) and the P & Q for the monopoly (#7 & #8). 

10. \[ Q = \frac{49/16}{\frac{1}{2}} = 28 \]
What is the change in consumer surplus caused by the monopoly? 

11. \[ Q = \frac{(51 + 13)}{2} = 44 \]
What is the producer surplus for the monopoly? 

12. \[ \frac{44}{2} - \frac{-9}{2} = (44/2) - (-9) = 44 - 9 = 35 \]
What is the change in producer surplus caused by the monopoly/price searching? 

13. \[ \frac{620.5}{2} = -220.5 \]
What is the dead weight loss caused by price searching? 

B. Short Answers (10 pts) From class and the textbook.

1. Explain why a law against “predatory pricing” might hurt consumers.
2. Give an example of an “unattractive incentive” created by “cost-plus regulation”.

With "cost-plus regulation" companies are allowed to charge a price just slightly above costs. This will make them less interested in innovations which reduce cost since regulations will force them to lower prices, too. Once the company becomes lazy and less cost efficient, it will be allowed to raise prices. At the same time it encourages these companies to allow costs to rise.