A. Market Power (40 pts) The market for widgets is:

<table>
<thead>
<tr>
<th>P</th>
<th>16</th>
<th>32</th>
<th>48</th>
<th>etc.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Qd</td>
<td>10</td>
<td>8</td>
<td>6</td>
<td>etc.</td>
</tr>
<tr>
<td>Qs</td>
<td>5</td>
<td>13</td>
<td>21</td>
<td>etc.</td>
</tr>
</tbody>
</table>

\[ \frac{\Delta Q}{\Delta P} = \frac{2}{16} = -\frac{1}{8} \]
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1. \( Q^d = -\frac{1}{8}P + 12 \)

What is the equation for the demand curve (Qd=f(P))?

2. \( Q^s = \frac{1}{4}P - 3 \)

What is the equation for the supply curve (Qs=f(P))?

3. \( P = 24 \) \( Q^d = Q^s = 9 \)

What is equilibrium P and Q?

4. \( e^{\frac{24}{-1}} = e^{\frac{12}{-1}} \) \( t = 13.5 \)

What are the cost at equilibrium?

5. \( MR = 48 - 16Q \)

What is the equation for the marginal revenue curve (MR=f(Q))?

6. \( MC = 6 + 2Q \)

What is the equation for the marginal cost curve (MC=f(Q))?

7. \( Q = 5 \)

What is the Q that maximizes producer surplus?

8. \( P = 56 \)

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. \( 56 \left( \frac{5}{2} \right) = (32)(\frac{5}{2}) = -224 \)

What is the change in consumer surplus caused by the monopoly?

11. \( \frac{56}{3} \left( \frac{5}{4} \right) = \left( \frac{50+6w}{2} \right) = 225 \)

What is the producer surplus for the monopoly?

12. \( \frac{56}{3} \left( \frac{5}{4} \right) = 32(5) - 5(8) \)

What is the change in producer surplus caused by the monopoly/price searching?

13. \( \frac{56}{3} \left( \frac{5}{4} \right) = -80 \)

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".