Problem 7.1

Table 7.13: Experimental Outcomes: Session 2

<table>
<thead>
<tr>
<th>Mean Price</th>
<th>$12.19</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number of Units Sold</td>
<td>42</td>
</tr>
<tr>
<td>Total Profits of All Firms</td>
<td>$302.00</td>
</tr>
<tr>
<td>Total Consumers' Surplus</td>
<td>$130.00</td>
</tr>
<tr>
<td>Sum of Firms' Profits and Consumers' Surplus</td>
<td>$432.00</td>
</tr>
</tbody>
</table>

Problem 7.2

Part a)
At prices below $5, how many units will the firm supply? 0
At prices above $5, how many units will the firm supply? 100

Parts b and c)
Figure 7.6: Competitive Supply and Demand

Problem 7.3

Table 7.14: Competitive Predictions

<table>
<thead>
<tr>
<th>Mean Price</th>
<th>$5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total Number of Units Sold</td>
<td>42</td>
</tr>
<tr>
<td>Total Profits of All Firms</td>
<td>$0</td>
</tr>
<tr>
<td>Total Consumers' Surplus</td>
<td>$427</td>
</tr>
<tr>
<td>Sum of Firms' Profits and Consumers' Surplus</td>
<td>$427</td>
</tr>
</tbody>
</table>
Problem 7.4
Table 7.15: Monopoly Predictions
Mean Price $15
Total Number of Units Sold 28
Total Profits of All Firms $280
Total Consumers' Surplus $63
Sum of Firms' Profits and Consumers' Surplus $343

Problem 7.5
Which of the two theories comes closer to predicting the results of Session 2? Monopoly Theory

Problem 7.6
Table 7.16: Experimental Outcomes: Session 3
Mean Price $9.05
Total Number of Units Sold 42
Total Profits of All Firms $170.00
Total Consumers' Surplus $257.00
Sum of Firms' Profits and Consumers Surplus $427.00

Problem 7.7
Which of the two theories comes closer to predicting the results of Session 3? Competitive Equilibrium Theory

Problem 7.8
Table 7.17: Experimental Outcomes: Session 4
Mean Price $12.62
Total Number of Units Sold 37
Total Profits of All Firms $282.00
Total Consumers' Surplus $110.00
Sum of Firms' Profits and Consumers' Surplus $392.00

Problem 7.9
Part a) In which session did firms make larger profits? Session 4
Part b) In which session was total consumers' surplus larger? Session 4
Part c) In which session was the sum of firms' profits and consumers' surplus larger? Session 4

Problem 7.10
Part a) The market efficiency of the experimental outcome in Session 2 = 101%
Part b) The market efficiency of the theoretically predicted outcome for a profit-maximizing monopoly in Session 2 = 80%