Experiment $6 \quad$ Section 6

Problem 6.1
Table 6.7: Experimental Results in Session 1 Mean Price \$24.31
Number of Lawn Ornaments Sold 13
Total Profits of Sellers from Transactions $\$ 127.00$
Total Profits of Buyers from Transactions \$144.00
Total Cost of Pollution
Total Profits of All Residents,
Net of Pollution Costs
$\$ 8.92$

Problem 6.2
Table 6.8
Mean Price $\quad \$ 31.90$
Number of Lawn Ornaments Sold 10
Total After-Tax Profits of Sellers
from Transactions -\$21.00
Total Profits of Buyers from Transactions \$56.00
Total Tax Revenue
\$200.00
Total Cost of Pollution \$201.60
Total Profits and Tax Revenue of All
Residents, Net of Pollution Costs
$\$ 33.40$

Problem 6.3
Table 6.9: Experimental Results in Session 3
Mean Price of Ornaments \$28.94
Mean Price of Permits \$8.89
Number of Lawn Ornaments Sold 9
Profits of Lawn Ornament
Sellers from Transactions \$58.50
Profits of Lawn Ornament
Buyers From Transactions
$\$ 84.50$
Total Revenue of Permit Sellers \$80.00
Total Cost of Pollution \$181.44
Total Profits of All Residents,
Net of Pollution Costs.
$\$ 41.56$

Figure 6.5


Table 6.10: Predictions of the Theory: Session 1
Mean Price \$24 *
Number of Lawn Ornaments Sold 15
Total Profits of Sellers from Transactions \$135.00
Total Profits of Buyers from Transactions \$150.00
Total Cost of Pollution \$302.40
Total Profits -\$17.40
*The equilibrium price is a range between $\$ 23$ and $\$ 25$ I've used \$24 in the calculations.

Problem 6.6
Part a) Shifts the supply curve up by $\$ 20$.
Part b) No effect on demand curve.

Problem 6.7

Table 6.11: Predictions of the Theory-Session 2

| Mean Price | $\$ 34.00$ * |
| :--- | ---: |
| Number of Ornaments Sold | 9 |
| Total Profits of Buyers | $\$ 39.00$ |
| Total Profits of Sellers | $\$ 24.00$ |
| Total Tax Revenue | $\$ 180.00$ |
| Total Cost of Pollution | $\$ 181.44$ |
| Total Profits and Tax Revenue of All |  |
| Residents, Net of Pollution Costs | $\$ 61.56$ |

*Any price between $\$ 33$ and $\$ 35$ is an equilibrium.
I've used \$34 in the calculations.

The total income of all residents is higher when the pollution tax is imposed.

Problem 6.8
Competitive equilibrium prediction for price of ornaments is
Competitive equilibrium prediction for quantity of ornaments is
$\$ 32.50$ * 9
*Any price between $\$ 30$ and $\$ 35$ is an equilibrium.
I've used \$32.50 in the calculations.
Problem 6.9
Table 6.12: Willingness to Pay for Pollution Permits
Seller Number in Willingness to Pay
Cost Market for a Permit
$8 \quad 3 \quad \$ 24.50$
$13 \quad 6 \quad \$ 19.50$
$18 \quad 3 \quad \$ 14.50$
$23 \quad 3 \quad \$ 9.50$
$28 \quad 3 \quad \$ 4.50$

Problem 6.10
Table 6.6: Supply and Demand for Permits.


