

Week 11 Lecture Exercise

Selling Price: 25
Cost Price: 20

1. Payoff Table

| | Papers Demanded | | | | |
|----------------|-----------------|-----|----|----|----|
| Papers Ordered | 6 | 7 | 8 | 9 | 10 |
| 6 | 30 | 30 | 30 | 30 | 30 |
| 7 | 10 | 35 | 35 | 35 | 35 |
| 8 | -10 | 15 | 40 | 40 | 40 |
| 9 | -30 | -5 | 20 | 45 | 45 |
| 10 | -50 | -25 | 0 | 25 | 50 |

2(a) Maximax rule

| # Ordered | Best state of Nature | Payoff in Best State of Nature |
|-----------|----------------------|--------------------------------|
| 6 | 6,7,8,9,10 | 30 |
| 7 | 7,8,9,10 | 35 |
| 8 | 8,9,10 | 40 |
| 9 | 9,10 | 45 |
| 10 | 10 | 50 |

2(b) Maximin rule

| # Ordered | Worst state of Nature | Payoff in Worst State of Nature |
|-----------|-----------------------|---------------------------------|
| 6 | 6,7,8,9,10 | 30 |
| 7 | 6 | 10 |
| 8 | 6 | -10 |
| 9 | 6 | -30 |
| 10 | 6 | -50 |

2(c) Regret Matrix

| | Papers Demanded | | | | |
|----------------|-----------------|----|----|----|----|
| Papers Ordered | 6 | 7 | 8 | 9 | 10 |
| 6 | 0 | 5 | 10 | 15 | 20 |
| 7 | 20 | 0 | 5 | 10 | 15 |
| 8 | 40 | 20 | 0 | 5 | 10 |
| 9 | 60 | 40 | 20 | 0 | 5 |
| 10 | 80 | 60 | 40 | 20 | 0 |