

# 中级微观经济学

## 垄断

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### 一. 判断题

1.  $\checkmark$

2.  $\checkmark$

3.  $\times$  价格相同

4.  $\times$  一级最高, 二级次之, 三级最低

### 二. 选择题

1. D

$$pq = p(165 - 0.5p)$$

$$p(165 - 0.5p) - 400 - 165 + 5p = -\frac{1}{2}p^2 + 170p + \pi \rightarrow 170p - 165 = 170$$

$$170 - 165 = 5, \text{ 选 D}$$

### 三. 计算题

$$(1) TR = Q(25 - 0.5Q) = -\frac{1}{2}Q^2 + 25Q$$

$$\frac{dTR}{dQ} = 25 - Q = MC = 0$$

$$\Rightarrow Q = 25 \Rightarrow TR = 25 \times 12.5 = 312.5 < 500, \text{ 没有人承包}$$

$$(2) (25 + A - 0.5Q)Q = -\frac{1}{2}Q^2 + (25 + A)Q$$

$$MC = -\frac{1}{2}(25 + A)^2 = 500$$

$$A = \sqrt{200 - 25} = 6.62$$

$$Q = 32$$

$$\text{每天 } 32 \times 6.62 = 211.8 \text{ 元}$$

$$\text{则 } 211.8 - 312.5 = -100.7 \text{ 元/天}$$

$$-\text{每天亏损 } 100.7 \text{ 元}$$

10. 计算题 2

$$1. Q = Q_S + Q_N = 360 - 40p_S - 20p_N = 360 - 60p$$

$$TR = pQ = p(360 - 60p) \Rightarrow \frac{\partial TR}{\partial p} = 0 \Rightarrow p = 3$$

$$\therefore Q = 60, TR = 540.$$

$$2. TR = p_S(220 - 40p_S) + p_N(140 - 20p_N)$$

$$\Rightarrow p_S = 2.75, p_N = 3.5$$

$$Q_S = 110, Q_N = 70 \Rightarrow TR = 547.5$$

五

$$LMC = 15Q^2 - 400Q + 2700$$

$$LAC = 5Q^2 - 200Q + 2700$$

$$TR = pQ = 2200Q - 100Q^2$$

$$MR = 2200 - 200Q$$

$$MR = LMC \quad LAC = p, \pi = 0 \Rightarrow \begin{cases} Q=10 \\ A=1 \end{cases} \Rightarrow p=1200$$