**Selected Problems - Chapter 13**

**2.1** (a) Disagree. A monopolist chooses quantity so that sets *MC*=*MR*, but then charges a price higher than *MR*. This is because a monopolist faces a downward-sloping demand curve. To sell more output, it must lower its price.

(b) Disagree. Demand still constrains monopoly. There are always substitutes (however distant) for a monopoly’s output. A rise in price causes a decrease in sales and may or may not decrease total revenue. But there is only one price that will maximize a monopoly’s profits.

(c) Agree. Demand elasticity is equal to –1 at the midpoint of the demand curve, and the marginal revenue curve bisects the quantity axis at that same level of output.

**2.4**

|  |  |
| --- | --- |
| Interval | Marginal Revenue |
| 0-10 | +120 |
| 10-20 | +90 |
| 20-30 | +60 |
| 30-40 | +30 |
| 40-50 | 0 |
| 50-60 | −30 |
| 60-70 | −60 |
| 70-80 | −90 |

*TR* at 0 is zero; *TR* at 10 is 1,200; 1,200 ÷ 10 = 120.

Produce as long as *MR* > *MC*; thus, if *MC* = $25, optimal output = 40 units.

Profits are *TR* = $3,000 (40 x $75) minus *TC* = [$800 *FC* + 1,000 *VC*(40 x $25)] = $1,800.

Thus, profit = $3,000 – $1,800 = $1,200.

When *MC =* $50, optimal output = 30 units, *TR* = $2,700 (30 x $90), and *TC* = ($800 *FC* + 1,500 *VC* (30 x $50)) = $2,300. Finally, profit = $2,700 – $2,300 = $400.

**2.6** (a) 

(b) 

(c) 

(d) 

(e) Profit =  (a loss of $10,000).