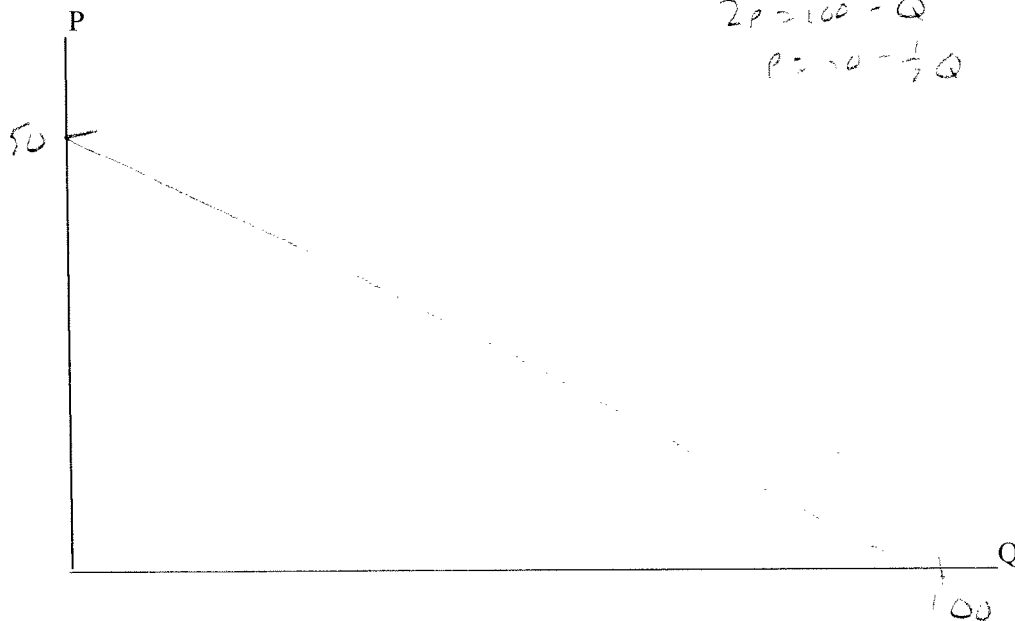


Use the following information to answer **questions 1-4**. A DVD making monopolist incurs \$10 in fixed costs. The marginal cost is \$3 per DVD produced.

P	Q	TR	MR	TC	Profit
\$10	0	0	—	10	(10)
9	1	9	9	13	(4)
8	2	16	7	16	0
7	3	21	5	19	2
6	4	24	3	22	2
5	5	25	1	25	0
4	6	24	-1	28	(4)

- What is the profit maximizing quantity for this DVD monopolist in the **short run**?
 - 0 (since closed in short run)
 - 5
 - 2
 - 1
 - 4
- What is the profit maximizing quantity for this DVD monopolist in the **long run**?
 - 0 (since closed in long run)
 - 5
 - 2
 - 1
 - 4
- How much profit (or loss) does this monopolist incur in the **short run**?
 - \$0
 - \$2
 - \$10
 - \$12
 - \$14
- How much profit (or loss) does this monopolist incur in the **long run**?
 - \$0
 - \$4
 - \$2
 - \$12
 - \$14
- In the long-run, how does a monopolist determine whether to be open or closed?
 - Close if cannot cover all fixed costs
 - Close if price exceeds marginal costs
 - Close if earning zero economic profit
 - Close if losing money
 - Close if price exceeds average variable costs
- What is the term “producer surplus” mean?
 - the gain to the firm from paying fixed costs in the short-run.
 - the dollar value of a firm’s profits.
 - the dollar value accrued to the firm from producing the profit maximizing output ignoring fixed cost.
 - the additional marginal revenue following a price increase.
 - the increase in total surplus when a monopoly operates rather than a perfectly competitive firm.

The monopoly has the following inverted demand curve: $Q^d = 100 - 2P$. Graph the demand curve below.



7. Find the slope of slope of the above demand curve.

- A. -2
- B. -1/2
- C. -1/4
- D. -4
- E. -1

8. What is the equation for MR for this monopolist?

- A. $MR = 100 - 4P$
- B. $MR = 50 - \frac{1}{2}Q$
- C. $MR = 4Q$
- D. $MR = 100 - 2P$
- E. $MR = 50 - Q$

$$MC = 50 - Q$$

Use the following information to answer questions #9-11:

A monopoly has a demand curve of $P = 96 - 4Q$, total cost: $TC = 10 + 2Q^2$ and marginal cost: $MC = 4Q$.

9. Find the profit maximizing quantity in the short-run:

- A. $Q = 8$
- B. $Q = 12$
- C. $Q = 24$
- D. $Q = 16$
- E. $Q = 0$ (since firm is closed in short-run)

$$MR = 96 - 8Q = 4Q$$

$$96 - 12Q$$

$$8 = Q$$

10. Find the profit maximizing price in the short-run:

- A. $P = \$8$
- B. $P = \$32$
- C. $P = \$64$
- D. $P = \$80$
- E. $P = \$0$ (since firm is closed in short-run)

$$P = 96 - 32$$

$$P = 64$$

$$(64)(8) - (10 + (2)(64))$$

$$512 - 128 = 384$$

11. Find the profit.

- A. \$512
- B. \$278
- C. \$138
- D. \$374
- E. -\$10 (since firm is closed in short-run)

Use the following information to answer the questions 12-17:

A monopoly has demand curve $P = 100 - Q$ and $TC = 10Q$ and $MC = 10$

12. Find the profit maximizing quantity in the long-run:

- A. $Q = 0$ (since closed in long-run)
- B. $Q = 10$
- C. $Q = 90$
- D. $Q = 50$
- E. $Q = 45$

$$MR = 100 - 2Q = 10$$

$$90 = 2Q$$

$$45 = Q$$

13. Find the profit maximizing price in the long-run

- A. $P = \$0$ (since closed in long-run)
- B. $P = \$55$
- C. $P = \$50$
- D. $P = \$10$
- E. $P = \$90$

$$P = 55$$

$$(55)(45) - (10)(45)$$

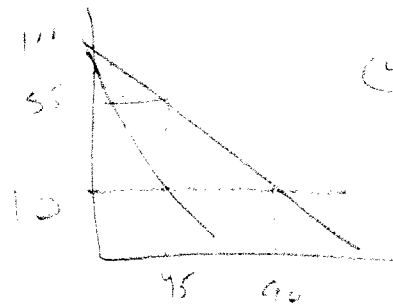
$$2475 - 450 = 2025$$

14. Find the profit

- A. \$2025
- B. \$2475
- C. \$2000
- D. \$2500
- E. \$800

15. Find the consumer surplus

- A. \$0
- B. \$1012.50
- C. \$1250
- D. \$50
- E. \$750



$$(45)(45)\left(\frac{1}{2}\right) -$$

16. Find the producer surplus

- A. \$100
- B. \$1500
- C. \$2500
- D. \$2025
- E. \$0

$$(45)(45)$$

$$(45)(55)\left(\frac{1}{2}\right)$$

17. Find the deadweight loss

- A. \$0
- B. \$50
- C. \$250
- D. \$1250
- E. \$1012.50

18. What role did the Texas Railroad Commission have in the U.S. oil industry?
- They set shipping rates for the transportation of oil in the U.S.
 - They set oil prices at artificially high prices
 - They were the first to set environmental standards on oil extraction
 - They determined which states were allowed to drill for oil
 - They founded the Oil Petroleum Engineering program at Texas A&M University
19. In which country did independent oil companies first gain access to?
- Mexico
 - Saudi Arabia
 - Iran
 - Iraq
 - Kuwait
20. Which country in OPEC is considered the dominant member?
- Venezuela
 - Kuwait
 - Saudi Arabia
 - Iran
 - Iraq
21. What is the "law of common capture"?
- promoted competition among the cigarette companies
 - reduced the U.S. dependence on foreign sources of oil
 - allowed individuals and companies to keep any oil pumped from the ground
 - established the federal income tax
 - placed advertising restrictions on cigarette companies to reduce the sale of cigarettes to minors
22. Why are most oil fields jointly produced in the Middle East?
- Less risk to host country
 - Less risk to the oil companies
 - Increases the proportion of oil that can be extracted
 - Avoids the common oil pool problem
 - All of the above
23. The first organization to offer health insurance was:
- Apple Computer Co.
 - Texas Railroad employees
 - Alaskan fisherman
 - U.S. Senators
 - University of Baylor
24. According to a heart attack study by David Cutler, which group had higher health care costs per heart attack?
- HMO plan
 - Indemnity coverage
 - No difference in the plans
25. What is Medicaid?
- Private health insurance for the elderly
 - Public health insurance for the poor
 - Public health insurance for the elderly
 - Private health insurance for the poor
 - Dental insurance for the poor and elderly

25. What is Medicaid?

- a. Private health insurance for the elderly
- b. Public health insurance for the poor
- c. Public health insurance for the elderly
- d. Private health insurance for the poor
- e. Dental insurance for the poor and elderly

26. Most Americans purchase their health care insurance

- a. Online after doing extensive online research of different health insurance agency offerings
- b. From a local health insurance agency
- c. From their employer
- d. From the federal government

27. Why have cost based reimbursement form of health insurance fallen out of favor in the past 30 years?

- a. Tax code changes which limit the tax deductibility of premiums
- b. Moral hazard problems
- c. Laws which have restricted health insurance companies ability to market these policies
- d. Many doctors stopped accepting traditional health insurance policies

28. The market demand for ECU t-shirts is: $Q = 50 - \frac{1}{2}P$. If price = \$10, find the price elasticity of demand for ECU t-shirts.

- a. -1/2
- b. -2
- c. -1/3
- d. -9
- e. -1/9

$$E_p = \frac{dQ}{dP} \cdot \frac{P}{Q}$$
$$E_p = -\frac{1}{2} \cdot \frac{10}{45} = -\frac{10}{90} = -\frac{1}{9}$$

29. If the price elasticity of demand for Pirate beer is $E_p = -1.2$. And the marginal cost of a case of Pirate beer is \$12. What is the profit maximizing price of a case of Pirate beer?

- a. \$24
- b. \$14.44
- c. \$72
- d. \$32.12
- e. \$60

$$MR = P \left(1 + \frac{1}{E_p} \right)$$
$$12 = P \left(1 + \frac{1}{-1.2} \right)$$

30. What does price elasticity of demand measure?

- a. The increase price when demand changes
- b. The increase in revenue from demand changes
- c. The responsiveness of consumers to income changes
- d. The responsiveness of consumers to price changes
- e. The change in revenue from price changes

$$12 = 1.667P$$
$$P = 71.99$$

Extra Credit: Only if you are taking the test at the regularly scheduled day and time and your cell phone has not rung in class since the last test.

31. If price is \$18 and the monopolist if producing $Q = 8$, the $ATC = \$8$, $AVC = \$6$, $MR = \$12$, and $MC = \$14$. How can this monopolist increase profits?

- A. increase quantity
- B. reduce quantity ✓
- C. keep quantity unchanged since already maximizing profits
- D. shut down since losing money in long-run.

Q ↓