

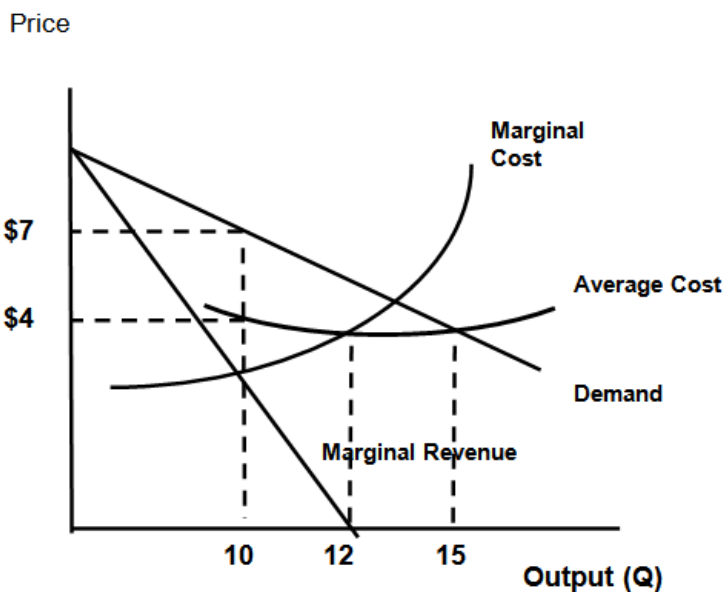
## Week #8 Worksheet Solutions - Long Run Costs ~ Government Failure

1. Fill in the TR and MR columns:

Price	Quantity	Total Revenue	Marginal Revenue
\$16	1	16	16
\$14	2	28	12
\$12	3	36	8
\$10	4	40	4
\$8	5	40	0
\$6	6	36	-4
\$4	7	28	-8

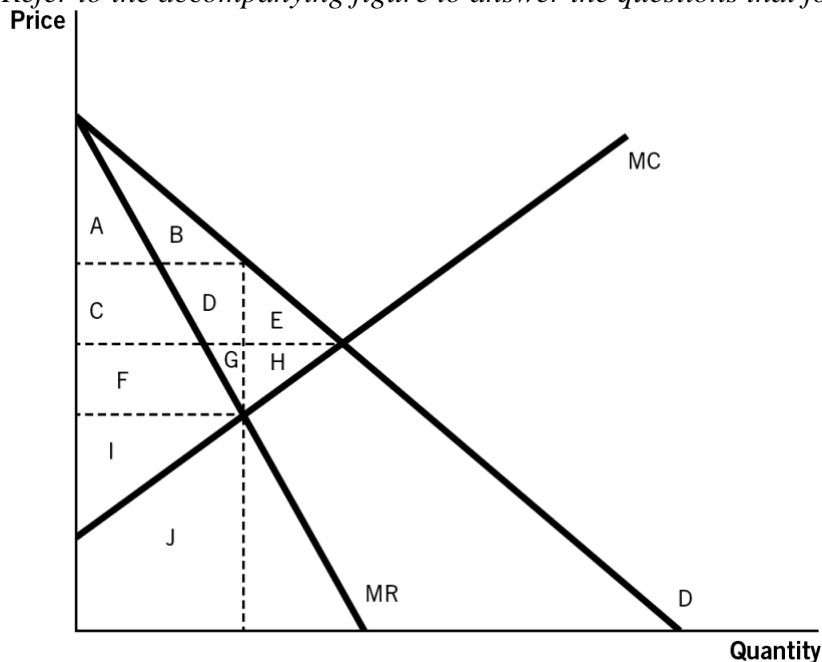
- What happens to total revenue as the monopolist decreases price? **Increases until MR=0**
- Where is the elastic part of the demand curve and where is the inelastic part? Would the monopolist want to operate in the inelastic part? **When MR is positive the demand curve is elastic. At MR=0 the demand curve is unit elastic. When MR<0 the demand curve is inelastic.**

2. Use the graph below to answer the following questions:



- To maximize profit, the monopolist will produce **10** units.
- At its profit maximizing output level, the monopolist will charge **\$7**.
- The monopolist will make a total profit or loss of **\$30**.

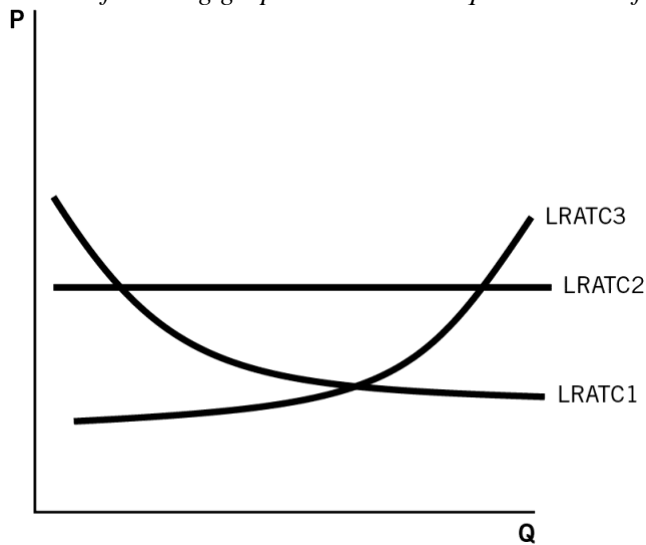
3. The Rossett Ruby Company has a monopoly on the supply of rubies. At its current level of output, the marginal cost of producing rubies is \$1,000 per carat. If the firm maximizes profit, it will set the price of rubies at
- \$1,000 per carat.
  - more than \$1,000 per carat
  - a level that equals the minimum possible average cost of producing rubies.
  - less than \$1,000 per carat.
4. If a firm has a monopoly in the supply of an item, it
- will make economic profit no matter what the demand for the item.
  - can earn economic profit in the short run, but will earn zero economic profit in the long run.
  - will maximize profit by adjusting output until marginal revenue equals marginal cost.
  - will maximize profit by adjusting output until price equals marginal cost.
  - Both (c) and (d)
5. Refer to the accompanying figure to answer the questions that follow.



The deadweight loss associated with this profit-maximizing monopoly is represented by area(s):

- A + B.
- B + D + G + E + H.
- D + G.
- J.
- E + H.

6. Use the following graph to answer the questions that follow.



If the firm expanded its scale of production and found that its average costs decreased, which of the curves would reflect this situation?

- a. LRATC2 and LRATC3
- b. LRATC2
- c. LRATC1
- d. LRATC3
- e. LRATC1 and LRATC2

7.

A firm is considering changing its plant size. It calculates the amount of output it would be able to produce and the total cost for various plant sizes, as shown in the accompanying table. If the firm is currently using plant size C, the firm is experiencing which of the following?

Plant Size	Quantity	Total Cost (\$)
A	1	10
B	10	80
C	100	900
D	200	2,000
E	500	5,500
F	1,000	15,000

- a. economies of scale
- b. diseconomies of scale
- c. constant returns to scale
- d. diminishing marginal product
- e. increasing marginal product

8. When firms grow larger, they sometimes add many additional layers of managers between the top executives and the entry-level employees. Because these managers do not actually produce any output themselves, we expect more layers of management to lead to:
- diminishing marginal returns.
  - diseconomies of scale.
  - economies of scale.
  - constant returns to scale.
  - increasing marginal returns.
9. When a firm grows larger, many additional layers of managers are sometimes added that do not actually produce any output. At the same time, the firm gains additional bargaining power over the prices it pays to its suppliers. If both of these factors have an equal effect, we would expect this firm to experience:
- diminishing marginal returns.
  - diseconomies of scale.
  - constant returns to scale.
  - economies of scale.
  - increasing marginal returns.
10. Three natural barriers to entry are:
- control of resources, economies of scale, and licensing.
  - economies of scale, problems raising capital, and control of resources.
  - problems raising capital, patents and copyright law, and licensing.
  - control of resources, patents and copyright law, and economies of scale.
  - control of resources, economies of scale, and licensing.
11. Two government-created barriers to entry are:
- licensing and economies of scale.
  - economies of scale and patent system/copyright law.
  - licensing and patent system/copyright law.
  - economies of scale and control of resources.
  - licensing and control of resources.
12. The price effect refers to how:
- lower prices affect the quantity sold.
  - firms can set their prices.
  - firms choose their quantity.
  - lower prices affect revenue.
  - lower output affects the price.