

Lecture 12: In-class Problems
EVENING

11/17/2020

Q1)

your reasoning.

2. Identify and explain the sources of market power for each case listed below:

- a. In the early 1990s, the DeBeers diamond cartel controlled almost all of the world's rough diamond production.
- b. Microsoft's Word has a virtual monopoly in word processing, even though many claim that better word-processing programs exist.
- c. Union Pacific dominates the rail shipping market in the north central United States.
- d. In Louisiana, people must pass a licensing test before they can arrange flowers for a living.

(d) gov't regulation

(a) control of key inputs

(b) switching costs.

≡ network good

(c) natural monopoly

economies of scale,

large fixed costs

Q2)

are maximized.

14. Suppose that a monopolistic seller of designer handbags faces the following inverse demand curve: $P = 50 - 0.4Q$. The seller can produce handbags for a constant marginal and average total cost of \$10.
- Calculate the profit-maximizing price for this seller.
 - Suppose the government levies a \$4 tax per unit on sellers of handbags. Calculate how this tax will affect the price the monopolist charges its customers.
 - Who bears the burden of this tax?

$$(a) P = a - 2bQ$$

$$\text{inv. demand curve} \\ P = 50 - 0.4Q$$

$$\text{Find where } MR = MC$$

$$MR = 10$$

Find MR

$$MR = 50 - (0.4)2(Q) \\ MR = 50 - 0.8Q$$

$$\text{Set } MR = MC$$

$$50 - 0.8Q = 10$$

$$40 = 0.8Q$$

$$Q = 50$$

Find profit max price

Plug $Q=50$ into inv. demand eqn

$$P = 50 - 0.4Q$$

$$P = 50 - 0.4(50)$$

$$P = 30$$

