

1 Price Discrimination Continued

1.1 Bundling

Used a firm sells more than one “type” of thing.

	Shirt	Pants	Both
Consumer 1	50	30	80
Consumer 2	10	80	90

Assume there are zero costs.

1.1.1 Selling Shirts Individually

What price maximizes profit/revneue?

At a price of \$10, both consumers buy and profit is \$20.

At a price of \$50, only consumer 1 buys but profit is \$50.

1.1.2 Selling Pants Individually

The optimal thing to do is set price to \$80 and only sell to consumer 1 for a profit of \$80

Total profit of selling shirts and pants individually is $\$50 + \$80 = \$130$

1.1.3 Selling the bundle

The optimal price is \$80 and earns the firm \$160 in profit since both consumers buy. This is \$30 than they earn by selling the goods individually.

1.2 Two-Part Tariff

This works when consumers demand multiple units of a good.

Suppose each individual’s demand for coffee in a month is:

$$q = 10 - p$$

What is the price and quantity to set to get the most profit from each individual. assume there no costs for producing coffee.

The inverse demand:

$$p = 10 - q$$

Profit function:

$$\pi(q) = q(10 - q) - 0$$

$$= 10q - q^2$$

What is the optimal number of cups to sell to each consumer?

The marginal profit:

$$\pi'(q) = 10 - 2q$$

This is zero where:

$$10 - 2q = 0$$

$$10 = 2q$$

$$q^* = 5$$

The price you can charge is (plug this into the inverse demand)

$$p^* = 5$$

The profit per month per consumer is: $\pi = 25$.