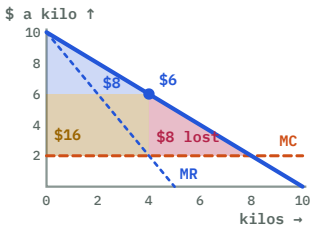
How many prices can one seller charge?

Mateo opens his strawberry field to visitors who pick their own. One price per kilo leaves money on the table. An entry fee, different prices for different groups, a menu or a bundle can take it, if he has market power and buyers cannot resell.

1 One price

Micro 1, Lesson 7

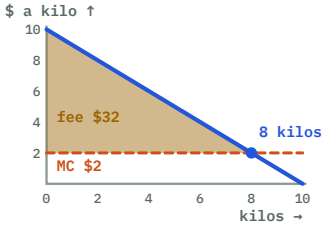
- One visitor: demand `Q = 10 − P` kilos · picking cost **MC** (marginal cost) **= $2** a kilo
- **MR** (marginal revenue) = revenue from one more kilo · `MR = 10 − 2Q` · twice as steep as demand
- `MR = MC` ⇒ **4 kilos** ⇒ price from the demand line **$6** ⇒ profit `(6 − 2) × 4 = $16`
- Visitor keeps (her **surplus**) `½ × 4 × 4 = $8` · **deadweight loss** = kilos 5-8 worth more than $2, not picked ⇒ `½ × 4 × 4 = $8`
- Practice · cherries `Q = 14 − P` ⇒ 6 kilos at **$8** ⇒ profit $36 · keeps $18 · lost $18



2 Two-part tariff

fee + price

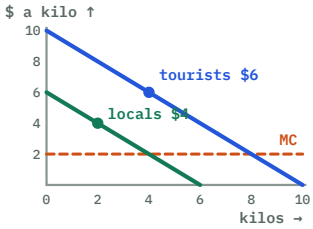
- **Two-part tariff** = an **entry fee** + a **price per unit** · gym, phone plan, theme park
- Price at cost **$2** ⇒ 8 kilos ⇒ visitor's gain `½ × 8 × 8 = $32` ⇒ fee **$32** (a cent less, so she says yes)
- Profit **$32** vs $16 ⇒ **double** · deadweight loss **0**: price = MC, every kilo worth ≥ $2 picked · the fee only moves money
- Practice · cherries, fee = what she keeps ⇒ total at $2 · $4 · $6 · $8 = **$72** · $70 · $64 · $54 ⇒ price at cost wins
- Walter **Oi**, American economist, **1971** ⇒ Disneyland: big entry fee or high price per ride?



3 Three degrees

Pigou, 1920

- Arthur **Pigou**, English economist, *The Economics of Welfare*, **1920**
- **First degree** = a price for **each buyer**, at their limit ⇒ bazaar haggling · Micro 7's perfect discrimination
- **Second degree** = a **menu**, buyers sort themselves ⇒ basket 1 kg $8 · crate 5 kg $30 ($6 a kilo) · early booking · versions (Digital 3)
- **Third degree** = **groups told apart** (ID, age, place) ⇒ locals `Q = 6 − P` ⇒ 2 kilos at **$4** · tourists **$6**
- Elasticity here = price ÷ kilos ⇒ locals **2** · tourists **1.5** ⇒ more elastic ⇒ **lower price** · `(P − MC) ÷ P = 1 ÷ elasticity` (elasticity: Micro 3)
- Practice · jam, cost $4 ⇒ town `12 − P` **$8** · school `8 − P` **$6** (elasticity 2 · 3) ⇒ $20 vs best single price $7 ⇒ $18



4 Bundling

one price for two goods

- **Bundling** = goods sold together at one price · costs ignored
- Apart ⇒ $8 each item, one buyer each ⇒ **$16** · box at $10 ⇒ both buy ⇒ **$20** · streaming bundles, cable packages
- Works when tastes run **opposite** ways · practice ⇒ jam 7 · 3 and honey 3 · 7 ⇒ $14 apart, **$20** box · one buyer values **both** more (9 · 6 vs 4 · 2) ⇒ $15 = $15 ⇒ **no gain**

	Jam	Berries	Box
Jam lover	$8	$2	$10
Berry lover	$2	$8	$10

5 Conditions and fairness

idea 6 of 11

- Needs: **market power** = sets its own price (Micro 7) · **no resale** (else crate buyers resell to basket buyers) · **tell buyers apart** or let them **sort themselves**
- Against ⇒ takes the buyers' surplus · for ⇒ can serve buyers a high single price leaves out (locals: none at the tourists' $6, 2 kilos at $4) ⇒ **no verdict**
- **Eleven ideas behind the curves** · `1 · A demand curve is a chain of best bundles` `2 · A price change is two effects: substitution and income` `3 · Selling what you own is the same choice` `4 · Risk has a price: the risk premium` `5 · Cost curves come from the cheapest mix of inputs` `6 · A seller with many prices takes the buyers' surplus` · next at university: a whole **menu of prices** (nonlinear pricing)

Watch out: the price comes from the **demand** line, not the MR line · the **more elastic** group pays **less** · a bundle is not priced at the sum of the parts ($16) but at what each buyer values the box ($10)