3. Demand

ECON1101 • KC Notes

2.1 Individual Demand Curve

- **Utility**: satisfaction an individual derives from consuming a given good/performing an action, measured in utils
- **Quantity Demanded**: quantity that maximises a consumer's utility when consuming the good
- Marginal utility (utility of consuming that unit/marginal benefit) decreases

Burgers ($2 each)			Chips ($1 each)		
Units	**Total utility**	**Marginal utility**	**Units**	**Total utility**	**Marginal utility**
0	0	0	0	0	0
1	4	4	1	1	1
2	6	2	2	2	1
3	7	1	3	3	1
4	7.6	0.6	4	4	1
5	8	0.4	5	5	1

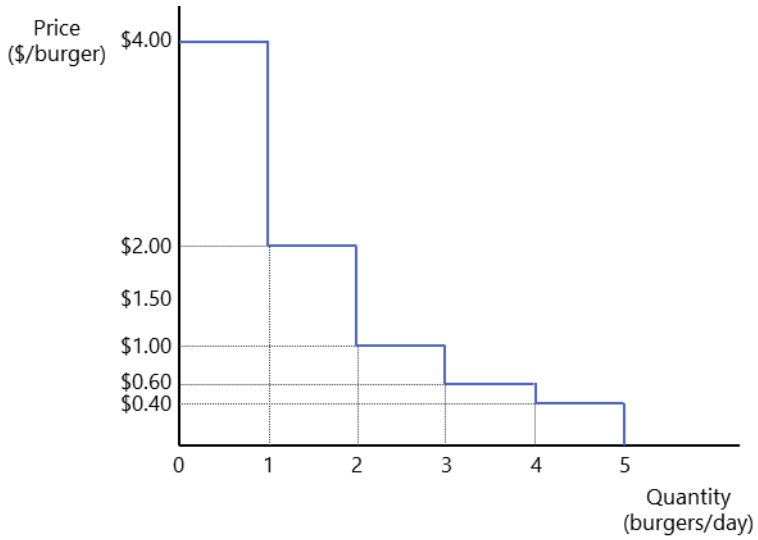
We choose to consume: burger (4 utils vs 2 utils for $2), burger (2 vs 2), chips (1 vs 2) etc

3.1.1 CHANGES TO QUANTITY DEMANDED

- **Substitution Effect**: Change in Q following a change in its relative price
  - Price is compared to other substitutes, e.g. tea and coffee are substitutes
- **Income Effect**: Change in Q following a change in purchasing power
  - **Normal good**: increase in consumption due to **increase** in PP, e.g. wine
  - **Inferior good**: increase in consumption due to **decrease** in PP, e.g. fast food
- **Giffen good**: increase in consumption even though price increases, e.g. McDonalds
  - Price increase causes people to become poorer, so they consume more McDonalds
- Usually substitution is stronger than income effect

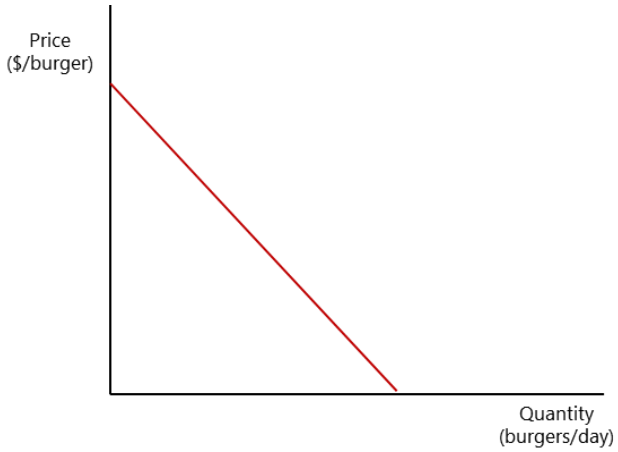
3.1.2 INTERPRETING THE DEMAND CURVE

- Note the similarities to the supply curve (2.1.1)
- Demand Curve is the relationship between price and quantity demanded
  - **Law of Demand**: tendency for a consumer to purchase more when price decreases
  - If price of burgers were increased from $2, we will see an decrease in the units of apples produced
  - Since chips are fixed at $1, we look at the marginal utility to derive the curve:



- **<u>Horizontal interpretation</u>**: At a certain price, the **quantity is the number of units consumer is willing to buy**
- **<u>Vertical interpretation</u>**: At a certain quantity, the **price is the <u>maximum</u> amount of money consumer is willing to pay** for that marginal unit
- **<u>Consumer reservation price</u>**: maximum price consumer is willing to pay for the good

3.3 Continuous Model for Demand Curve



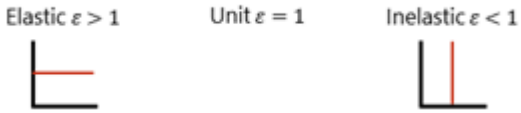
- Downwards sloping due to law of demand

3.3.1 **SHIFTS** IN DEMAND CURVE (**<u>MPEP</u>**)

1. **Marketing**
2. **Changes in price of substitute/complement, change in purchasing power**
    a. Substitute: increase price of one will increase demand of other
    b. Complement: increase price of one will decrease demand of both
3. **Preferences**
4. **Expectation of change in price**
5. **Population growth**

3.3 Elasticity

- **<u>Elasticity</u>**: Measures the **responsiveness** of demand **when price changes**
- **Elasticity** at A: $\boldsymbol{\epsilon = \frac{P_A}{Q_A} \times \frac{1}{slope}}$



3.4 Factors of Price Elasticity of Demand (**<u>ADIT</u>**)

1. **Availability of substitutes**: Larger amount of substitutes, more elastic
2. **Definition of a good**: whole category 'salt' is not elastic, 'brand of salt' is very elastic
3. **Income share**: % increase in price, e.g. 80% increase on a pen vs a flight
4. **Time horizon**: more time to search for substitutes, more elastic