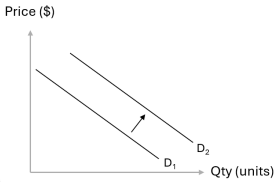
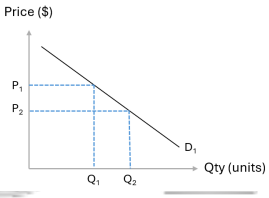
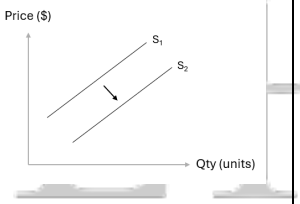
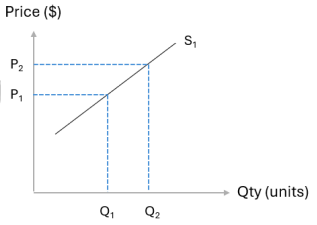
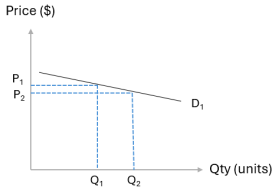
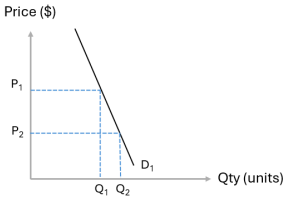
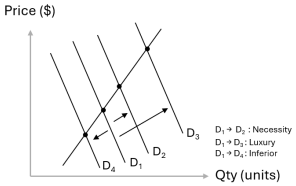
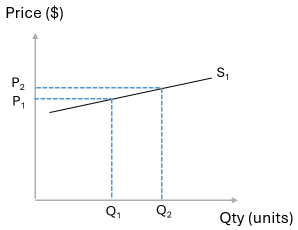
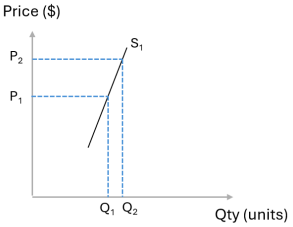
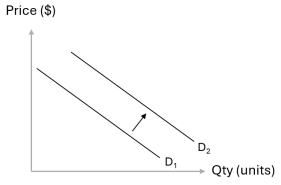
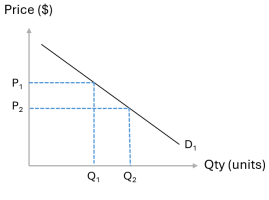
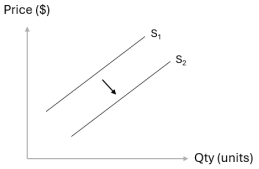
Demand and Supply (Cheat Sheet)

	Demand	Quantity demanded	Supply	Quantity supplied
Definition	Amount of goods that consumers are willing and able to buy in a given time period at various prices	Amount of goods that consumers are willing and able to buy in a given time period at a specific price	Amount of good that producers are willing and able to offer in a given time period at various prices	Amount of goods that producers are willing and able to offer in a given time period at a specific price
Factors affecting change	Affected by non-price factors (PTIDE) • **Price of related goods** *(substitutes & complements)* • **Taste & Preference** *(fashion, advertising, seasons)* • **Income** *(purchasing power, affected by GDP growth rate)* • **Demographics** *(size, age, sex)* • **Expectations** *(expectation of future income/prices)*	Affected by price factors	Affected by non-price factors (CPPSE) • **Cost of production** *(cost of inputs, technology, productivity, tax/subsidy)* • **Price of related goods** (competitive/joint supply) • **Number of Producers** *(barriers of entry)* • **Supply Shocks** *(natural: floods, droughts / man-made: conflict/riots)* • **Expectations** *(future outlook)*	Affected by price factors
Graphical Representation	Shift in demand curve ($D_1 \rightarrow D_2$) 	Single point on demand curve ($Q_1 \rightarrow Q_2$) 	Shift in supply Curve ($S_1 \rightarrow S_2$) 	Single point on supply curve ($Q_1 \rightarrow Q_2$) 

Elasticities of Demand/Supply (Cheat Sheet)

	Price elasticity of Demand (PED)	Income elasticity of Demand (YED)	Cross elasticity of Demand (CED)	Price elasticity of Supply (PES)
Definition	PED measures responsiveness of **quantity demanded** of a good to changes in its price, *ceteris peribus*	YED measures the responsiveness of **demand** of a good to changes in income, *ceteris peribus*	CED measures the responsiveness of **demand** of a good X to changes in price of good Y, ceteris peribus	PED measures responsiveness of **quantity supplied** of a good to changes in its price, *ceteris peribus*
Formula	$\frac{\%\ \Delta \text{ in } Q_D}{\%\ \Delta \text{ in P}}$	$\frac{\%\ \Delta \text{ in } Q_D}{\%\ \Delta \text{ in Income}}$	$\frac{\%\ \Delta \text{ in } Q_{DX}}{\%\ \Delta \text{ in } P_Y}$	$\frac{\%\ \Delta \text{ in } Q_S}{\%\ \Delta \text{ in P}}$
Sign & Magnitude	Always negative *Hence we analyse using its magnitude* |PED| > 1 Price elastic demand  *Graph is flat* Q_D changes more than proportionate to change in price |PED| < 1 Price inelastic demand  *Graph is steep* Q_D changes less than proportionate to change in price	Positive or negative  YED > 1 Luxury Goods Increase in Y leads to more than proportionate **increase** in demand 0 < YED < 1 Necessities Increase in Y leads to less than proportionate **increase** in demand YED < 0 Normal Good Increase in Y leads to **decrease** in demand	Positive, negative or 0 CED > 0 Substitutes A **decrease** in the price of Good Y (e.g. Coca Cola) leads to a **decrease** in demand for Good X (e.g. Pepsi) *As the price of Coca Cola decreases, consumers would shift their consumption to purchase Coca Cola instead of Pepsi, leading to a decrease in demand for pepsi* CED < 0 Complements A **decrease** in the price of Good Y (e.g cars) will lead to an **increase** in demand for Good X (e.g. gasoline) *With a decrease in car prices, more people would own cars and drive about, increasing demand for gasoline.*	Always positive PES > 1 Price elastic supply  Q_S changes more than proportionate to change in price 0 < PES <1 Price inelastic supply  Q_S changes less than proportionate to change in price
Factors affecting change	• **Substitutes** *More: |PED|>1* *Less: |PED|<1* • **Necessity of good** *Luxury: |PED|>1* *Necessities: |PED|<1* • **Proportion of income** High %: *|PED|>1* Low %: *|PED|<1* • **Time period** Long: *|PED|>1* Short: *|PED|<1*	• **Nature of goods** • **Level of income**	• **Nature of relationship**	• **Time period** *Long: PES > 1* *Short: 0 < PES < 1* • **Inventory/Storage** *Can be stored: PES > 1* *Perishables: 0 < PES < 1* • **Nature of production** *Production period* *Long: PES > 1* *Short: 0 < PES < 1* • **Spare capacity** *High: PES > 1* *Low: PES <1*
Graphical Representation	Shift in demand curve ($D_1 \rightarrow D_2$)  	Single point on demand curve ($Q_1 \rightarrow Q_2$)  	Shift in supply Curve ($S_1 \rightarrow S_2$)  	Single point on supply curve ($Q_1 \rightarrow Q_2$)