

Command Term	Asks Students to do:
Analyse	Break down in order to bring out the essential elements or structure.
Apply	Use an idea, equation, principle, theory or law in relation to a given problem or issue.
Calculate	Obtain a numerical answer showing the relevant stages in the working.
Comment	Give a judgment based on a given statement or result of a calculation.
Compare	Give an account of the similarities between two (or more) items or situations, referring to both (all) of them throughout.
Compare and contrast	Give an account of similarities and differences between two (or more) items or situations, referring to both (all) of them throughout.
Construct	Display information in a diagrammatic or logical form.
Contrast	Give an account of the differences between two (or more) items or situations, referring to both (all) of them throughout.
Define	Give the precise meaning of a word, phrase, concept or physical quantity.
Derive	Manipulate a mathematical relationship to give a new equation or relationship.
Describe	Give a detailed account.
Determine	Obtain the only possible answer.
Discuss	Offer a considered and balanced review that includes a range of arguments, factors or hypotheses. Opinions or conclusions should be presented clearly and supported by appropriate evidence.
Distinguish	Make clear the differences between two or more concepts or items.
Draw	Represent by means of a labelled, accurate diagram or graph, using a pencil. A ruler (straight edge) should be used for straight lines. Diagrams should be drawn to scale. Graphs should have points correctly plotted (if appropriate) and joined in a straight line or smooth curve.
Evaluate	Make an appraisal by weighing up the strengths and limitations.

Examine	Consider an argument or concept in a way that uncovers the assumptions and interrelationships of the issue.
Explain	Give a detailed account including reasons or causes.
Identify	Provide an answer from a number of possibilities.
Justify	Give valid reasons or evidence to support an answer or conclusion.
Label	Add labels to a diagram.
List	Give a sequence of brief answers with no explanation.
Measure	Obtain a value for a quantity.
Outline	Give a brief account or summary.
Plot	Mark the position of points on a diagram.
Show	Give the steps in a calculation or derivation.
Show that	Obtain the required result (possibly using information given) without the formality of proof. "Show that" questions do not generally require the use of a calculator.
Sketch	Represent by means of a diagram or graph (labelled as appropriate). The sketch should give a general idea of the required shape or relationship, and should include relevant features.
Solve	Obtain the answer(s) using algebraic and/or numerical and/or graphical methods.
State	Give a specific name, value or other brief answer without explanation or calculation.
Suggest	Propose a solution, hypothesis or other possible answer.
To what extent	Consider the merits or otherwise of an argument or concept. Opinions and conclusions should be presented clearly and supported with appropriate evidence and sound argument.

Microeconomics

Supply and Demand			
Demand Function	$Q_d = a - bP$	<p>Q_d = Quantity Demanded a = Q_d when Price is \$0 b = Slope (the amount that the quantity will change when there is an increase in price by the amount of P) P = Price</p>	
Supply Function	$Q_s = c + dP$	<p>Q_s = Quantity Supplied c = Q_s when Price is \$0 d = Slope (the amount that the quantity will change when there is an increase in price by the amount of P) P = Price</p>	
Price of Market Equilibrium	$Q_s = Q_d$	$a - bP = c + dP$	Solve for P
Quantity of Market Equilibrium		<i>Input the equilibrium price found using the $Q_s = Q_d$ into either the Supply or Demand function</i>	
Price Elasticity of Demand (PED)	$\frac{\% \Delta Q_d}{\% \Delta P}$ (divided by)	Δ = Change Q_d = Quantity Demanded P = Price	PED > 1 = Price Elastic PED < 1 = Price Inelastic PED = 1 = Unitary Elastic PED = 0 = Perfectly Inelastic PED = ∞ = Perfectly Elastic
Cross Elasticity of Demand (XED)	$\frac{\% \Delta Q_d \text{ of product A}}{\% \Delta P \text{ of product B}}$ (divided by)	Δ = Change Q_d = Quantity Demanded P = Price	XED < 0 = Substitutes XED > 0 = Compliments
Income Elasticity of Demand (YED)	$\frac{\% \Delta Q_d}{\% \Delta Y}$ (divided by)	Δ = Change Q_d = Quantity Demanded Y = Income	YED < 0 = Inferior Good YED > 0 = Normal Good YED > 1 = Luxury Good
Price Elasticity of Supply (PES)	$\frac{\% \Delta Q_s}{\% \Delta P}$	Δ = Change Q_s = Quantity Supplied P = Price	PES > 1 = Supply Elastic PES < 1 = Supply Inelastic PES = 1 = Unitary Elastic PES = 0 = Perfectly Inelastic PES = ∞ = Perfectly Elastic

Theory of the Firm			
Total Product		Total production output	
Average Product (AP)	TP / V	TP = Total Product V = Variable	Average produced (output) by any one of the factors of production
Marginal Product (MP)	$\Delta TP / \Delta V$	Δ = Change TP = Total Product V = Variable	Extra produced (increased output) when any one of the factors of production are increased
Total Cost	$TFC + TVC$	TFC = Total Fixed Cost TVC = Total Variable Cost	
Average Total Cost (ATC)	TC / q	TC = Total Cost q = quantity produced	
Average Fixed Cost (AFC)	TFC / q	TFC = Total Fixed Cost q = quantity produced	AFC falls as output increases
Average Variable Cost (AVC)	TVC / q	TVC = Total Variable Cost q = quantity produced	AVC falls as output increases
Marginal Cost (MC)	$\Delta TC / \Delta q$	Δ = Change TC = Total Cost q = quantity	Extra cost to increase production by one
Total Revenue (TR)	$P \times q$	P = Price q = quantity	
Average Revenue (AR)	P	P = Price	
Marginal Revenue (MR)	$\Delta TR / \Delta q$	Δ = Change TR = Total Revenue q = quantity	Change in Total Revenue when there is a change in output
Profit	TR - TC	TR = Total Revenue TC = Total Cost	TR = TC - Normal Profit TR < TC - Abnormal Profit TR > TC - Loss
Shutdown Price	Where P = < AVC	P = Price AVC = Average Variable Cost	
Break Even Price	Where ATC = > P and P = < ATC	P = Price AVC = Average Variable Cost	<i>Also where TR = TC</i>

Macroeconomics

Gross Domestic Product (GDP) [Nominal GDP]	C + I + G + (X-M)	C = Consumer Spending I = Investment G = Government Spending X = Exports M = Imports <i>((X-M) = NX = Net Exports)</i>	Also Aggregate Demand (AD) <i>Calculated through the expenditure method</i>
Real GDP	Nominal GDP adjusted for inflation		Must be compared to a Base Year
Gross National Product (GNP) <i>Also called GNI - Gross National Income</i>	GDP + Net property income from abroad	GDP = Gross Domestic Product	Income from property in other countries minus foreign property located in the domestic country
Net National Product (NNP)	GNP - capital depreciation	GNP = Gross National Product	Capital depreciation is the "used up" capital when products are produced
Green GDP	GDP - cost to the environment		
Multiplier	1 / (1-mpc) or 1 / mpw	mpc = marginal propensity to consume - amount of income respent in the domestic economy mpw = marginal propensity to withdraw - amount of income that is saved, paid in taxes, and spent on imports	
Inflation	Current Basket of Goods (minus) Base Year Basket of Goods (divided by Base Year Basket of Goods)		<i>Usually Measured through the Consumer Price Index (CPI)</i>
Unemployment Rate	Unemployed / Total Labor Force		
Progressive Income Tax	Using a tax table take percentages off of each "stack." Do not take the highest percentage from the whole amount.		

International Economics

Structure of the balance of payments

While the structure of the balance of payments may vary from country to country, a working version of the structure (and components) of the balance of payments is given below and must be used by DP economics students for the purposes of the curriculum and assessment.

Current account

- Balance of trade in goods
- Balance of trade in services
- Income
- Current transfers

Capital account

- Capital transfers
- Transactions in non-produced, non-financial assets

Financial account

- Direct investment
- Portfolio investment
- Reserve assets

Current account = capital account + financial account + errors and omissions

Exchange Rates

Exchange Rates - The value of one currency expressed in terms of another currency.