#### FORMULA SHEET MATHEMATICAL ECONOMICS

P R O D U C T I O N	Primal problem $M \tilde{m} C(K, L) = p_K K + p_L L$ $st.  q(K, L) = Q_{giv}, \ Q_{giv} = q_{max}(K, L) \ (dival)$
	$\label{eq:Dual problem} \textbf{\textit{Max }} q(K,L)$ $ss. \ \ C(K,L) = p_K K + p_L L = TC_{giv}. \ \ TC_{giv} = C_{nh}(K,L) (primal)$
	Rate of Technical Substitution (RTS) $RTS(K \text{ for } L) = \frac{q_K}{q_L}.$
	Quasi Concave $q(K,L) \text{ is Quasi - Concave if } q_K > 0 \text{ and } q_L > 0 \text{ and } q_K (q_L)^2 - 2q_{KL}(q_L)(q_K) + q_{LL}(q_K)^2 < 0$
CONSUMPTION	Primal problem $ Min \ B(X,Y) = p_X X + p_Y Y $ s.t. $U(X,Y) = U_{gs}$ , $U_{gs} = U_{max}(X,Y)$ (dual)
	$\label{eq:Dual problem} \begin{aligned} & Max \ U(X,Y) \\ st. \ & E(X,Y) = p_X X + p_Y Y = T E_{go},  T E_{go} = E_{nh}(X,Y) (primal) \end{aligned}$
	$X_{uv} = -\begin{bmatrix} \frac{\partial V}{\partial p_X} \\ \frac{\partial V}{\partial TB_{ge}} \end{bmatrix}, \ Y_{uv} = -\begin{bmatrix} \frac{\partial V}{\partial p_Y} \\ \frac{\partial V}{\partial TB_{ge}} \end{bmatrix}$
	Dual $\rightarrow$ Primal: Shephard $X_{comp} = \frac{\partial W}{\partial p_X}, \ Y_{comp} = \frac{\partial W}{\partial p_Y}$
	Slutsky Relation $\frac{\partial d_X}{\partial p_X} = \frac{\partial h_X}{\partial p_X} - \frac{\partial d_X}{\partial TE_{gp}} * X_{tree}$

# **Formula Sheet Economics**

**TD Snyder** 



#### Formula Sheet Economics Book Review: Unveiling the Magic of Language

In an electronic era where connections and knowledge reign supreme, the enchanting power of language has become more apparent than ever. Its ability to stir emotions, provoke thought, and instigate transformation is truly remarkable. This extraordinary book, aptly titled "**Formula Sheet Economics**," published by a highly acclaimed author, immerses readers in a captivating exploration of the significance of language and its profound impact on our existence. Throughout this critique, we will delve in to the book is central themes, evaluate its unique writing style, and assess its overall influence on its readership.

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