Matrices

Matrix Manipulations AT: Transpose of A - Switch Rows with Columns (R1 becomes C1, R2 becomes C2 etc.)

-A = -1 . A

A^{-1}: Inverse of A

A^{-1} . I = I = A . I

Augment Identity matrix to matrix and perform Guass-Jordon elimination on both to get change Identity matrix to the Inverse.

EROs: Switch Rows Scale Row (Multiply entire row) Add multiple of different row to another

A matrix A is in row echelon form if

1. The nonzero rows in A lie above all zero rows (when there is at least a nonzero row and a zero row). 2. The first nonzero entry in a nonzero row (called a pivot) lies to the right of the pivot in the row immediately above it

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Linear Functions

Slope-Intercept Formula: y=mx+b

Point-Slope: y-y1=m(x-x1)

Slope Formula: (m)=rise/run OR m=(y2-y1)/(x2-x1)

Standard Form: Ax + By = C

Note that b is equal to y, the b value is where the line crosses on the y-axis when x is equal to zero

Systems of Equations

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Equilibrium Point: Qs = Qd, Supply=Demand

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