

Featured software

Distillation simulator	www.vaxasoftware.com/soft_eduen/sden.html
FunGraph - Graphs of mathematical functions	www.vaxasoftware.com/soft_eduen/fungraph.html
Design of distillation columns by McCabe-Thiele method	www.vaxasoftware.com/soft_eduen/mcth.html
Worksheets Generators for Maths and Chemistry	www.vaxasoftware.com/pc/index.html
Acid-base equilibrium calculator	www.vaxasoftware.com/soft_eduen/abew.html
Statistics and Probabilty tools for Windows	www.vaxasoftware.com/soft_eduen/statool.html

In a linear system of equations:

A = Coefficient matrix.

A* = Augmented matrix.

$\left\{ \begin{array}{l} \text{If } R(A) = R(A^*) \Rightarrow \text{Compatible system} \\ \\ \text{If } R(A) \neq R(A^*) \Rightarrow \text{Incompatible system : No solution.} \end{array} \right.$	$\left\{ \begin{array}{l} \text{If } R(A) = R(A^*) = \text{number of unknowns} \rightarrow \\ \text{Determinate system :} \\ \text{Unique solution.} \\ \\ \text{If } R(A) = R(A^*) < \text{number of unknowns} \rightarrow \\ \text{Indeterminate system :} \\ \text{Infinite solutions.} \end{array} \right.$
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Where $R(x)$ denotes Rank of the x matrix.