



## COMPUTER ALGEBRA RECIPES FOR MATHEMATICAL PHYSICS WITH CDROM

### **computer algebra recipes for pdf**

In linear algebra, an eigenvector or characteristic vector of a linear transformation is a non-zero vector that changes by only a scalar factor when that linear transformation is applied to it. More formally, if  $T$  is a linear transformation from a vector space  $V$  over a field  $F$  into itself and  $v$  is a vector in  $V$  that is not the zero vector, then  $v$  is an eigenvector of  $T$  if  $T(v)$  is a scalar ...

### **Eigenvalues and eigenvectors - Wikipedia**

In linear algebra, Gaussian elimination (also known as row reduction) is an algorithm for solving systems of linear equations. It is usually understood as a sequence of operations performed on the corresponding matrix of coefficients. This method can also be used to find the rank of a matrix, to calculate the determinant of a matrix, and to calculate the inverse of an invertible square matrix.