

Mathematics (3)

Systems of Equations and Matrices, Matrices, Matrix Arithmetic & Operations, Properties of Matrix Arithmetic and the Transpose. Systems of Linear Equations and Matrices: Systems of Equations, Row operations, Row Echelon Form, Solving Systems of Equations, Gaussian elimination method, Gauss Jordan method. Matrices Applications: Inverse Matrices and Elementary Matrices, Finding Inverse Matrices, Special Matrices Determinants: The Determinant Function, Properties of Determinants, The Method of Cofactors, Properties of Determinants, Determinants Applications: Finding Inverse Matrices, Cramer's Rule Solving Systems of Equations. Vector Spaces, Subspaces, Linear Independence, Basis and Dimension, Eigenvalues, Eigenvectors, Diagonalization