

Index for Workbook 22

Characteristic equation	8	Matrix	- diagonal	15
Coupled ODEs	25		- diagonalisation	19, 41
Determinant	3		- Hermitian	45
Diagonal matrix	15		- modal	19
Diagonalisation of matrix	19, 41		- powers	21
Dominant eigenvalue	48		- similar	19
Eigenvalue	8		- singular	3
Eigenvalues			- symmetric	35
- definition	8	Modal matrix		19
- diagonal matrix	15	Modelling vibrating system		68
- dominant	48	Normalised eigenvector		9
- linear dependence	15	Numerical methods		46-53
- product	14	Orthogonal vectors		38
- repeated	31	Power method		48
- smallest	52	QR technique		53
- sum	14	Repeated eigenvalues		31
Eigenvector	8, 32, 40	Second order ODEs		28
First order ODEs	24	Shifted inverse power method		53
Hermitian matrix	45	Similar matrices		19
Homogeneous system	4	Similarity transformation		19, 53
Householder transformation	53	Singular matrix		3
Inhomogeneous system	4	Symmetric matrices		35
Inverse power method	52	Systems of linear equations		4, 24, 28
Linear equations	4, 24, 28			