

1. Eigenvalue problems
 - Solve eigenvalue problems, probably non-homogeneous;
 - Properties of eigenvalues, eigenfunctions;
 - Self-adjoint operator;
2. 1D heat conduction equation, probably non-homogeneous;
3. 1D wave equation, probably non-homogeneous; Two methods for solving homogeneous wave equations;
4. 1D Laplace equation on a rectangle, probably non-homogeneous;