1. 4.4.5. Neumann eigenproblem and wave equation.

2. 4.4.6. Bessel's functions and circular drum.

3. 5.1.2. Homogenous heat equation with time-independent Dirichlet boundary condition.

4. 5.1.3. Non-homogenous heat equation with homogenous data.

5. 5.1.4. Homogenous heat equation with general Dirichlet boundary condition. You need not discuss convergence issues unless you want to.

6. 5.1.7. Energy method for uniqueness of solution of heat equation.