Two problems on change of variables in ODE: problem 1, page 139 and problem 11 page 227.

Abstract Sturm-Liouville practice, problems 1, 2, page 217 and problems 1 - 5 page 225.

Applications of Sturm-Liouville theory, problems 2, 4 pages 236, 237; 2, 3 pages 244 and 245.

Beyond page 245 you will find many additional applications of regular Sturm-Liouville problems.