This weeks problem set provides practice with the Gram-Schmidt process and adjoint operators. A question marked with a  $^{\dagger}$  is difficult and probably too hard for an exam (though still illustrates a useful point). A question marked with a  $^*$  is especially important.

**Homework 6:** due Friday 16 March: questions 22a from 6.2 and 4a, b below.

1. From section 6.2, problems 1,  $2b, g, i, k, 5^*, 6, 7, 9, 13^*, 17^*, 22$ .