

## 1 The Heteronuclear Diatomic Molecule

1. In Sutton on pages 32-33, Schrodinger's equation is solved for the heteronuclear diatomic molecule. However, some of the details were left out. Complete the derivation, filling in all of the necessary steps.

2. By now you should have a working python code for solving the homonuclear diatomic problem. Modify this code to model a heteronuclear diatomic molecule and use your code to recreate figure 2.4 in the book.