

Please write solutions neatly on a separate sheet of paper. Show all of your work and report answers with the correct significant figures and units.

1. Houston #3.13 – Note that Houston uses the term “activated complex” instead of “transition state”. Equations for partition functions can be found in Table 3.1 in Houston or section 10.6.1. The rest of section 10.6 may also be useful since it describes an application of TST to a real reaction.

2. Steinfeld #10.8

3. Steinfeld #10.6 (d) and (e) – you will need to decide whether the transition state is linear or non-linear. Solutions for (a) – (c) will be in the ungraded homework problems.