MATH 348 Reading Questions

Sections 6.1 and 6.2 NAME

Read Sections 6.1–6.2 in the text and answer the following questions. This sheet will be checked for completeness at the beginning of the next class.

1. What is the definition of a **convex** space?

2. If f and g are homotopic, and maps g and h are homotopic, then are f and h homotopic? Why or why not?

3. Summarize Proposition 6.9 in your own words.

4. What does it mean for two spaces to be **homotopy equivalent**?

5. How are the concepts of *homeomorphic* and *homotopy equivalent* related?

6. What does it mean for a space to be **contractible**? Give examples of at least two contractible spaces.