

## Exercises for Chapter 9, Part 1

**9.1** Consider the data set  $X = \{-6, -5, 0, 4, 7\}$ .

- a) Draw the single linkage dendrogram.
- b) Draw the complete linkage dendrogram.
- c) Compute the sequence of cluster centers that c-means produces with initialization  $V = \{5, 6\}$ .
- d) Find an initialization for which c-means yields a different result for  $X$ .