

Homework 4 (due Wed, Sept 22)

1. Print out and fill in the next three pages:
 - Assume a step-matrix in which transitions cost 1 step but transversions cost 2 steps.
 - As data, use a character in which A is the state for taxa 1 and 2 , taxon 3 has state G, and taxon 4 has a C
2. On each page:
 - (a) Fill in the circle with character state (either the observed data for tips or the inferred states)
 - (b) There are 16 trees on each page, use them to show all 16 possible ancestral character state combinations.
 - (c) Add 0, 1, or 2 tick marks to each branch to indicate the cost of the change across the branch.
 - (d) Circle the most parsimonious character state reconstruction(s) for each tree.
 - (e) Write the trees parsimony score by the tree at the top of the page.





