1. Answer the following questions based on tree \#1 and \#2.
a. Are the trees below representing the same relationship?
b. In tree 1 does C and B form a monophyletic group? What about in tree 2?
c. In tree 1 what is the sister group to A ?

\#1

\#2
2. Answer the following questions based on tree \#3 and \#4.
a. Are the trees below representing the same relationship?
b. What is the sister group to $C$ in each tree?

3. In the tree below what is the sister group to $A$ ? What is the sister group to $B$ ? Do $B, C, A$ form a monphyletic group?

4. How many monophyletic clades are in the following tree? How else could you draw this tree without changing the relationships?

5. What is the sister group to E ? What about to H ?
a. How many monophyletic clades are there in this tree?
b. Would switching the positions of H and G change the relationships within the tree?
c. Would switching the positions of $C$ and $D$ change the relationships within the tree?

