CMSC 341 Data Structures
K-D Tree Review

These questions will help test your understanding of k-D trees. These questions are only a study guide. Some of these questions may appear on your exam, although perhaps in a different format. Questions NOT found on this study guide may also appear on your exam.

1. What is the purpose of k-D trees?

2. Explain how a 2-D tree extends a binary search tree.

3. Insert the following pairs (in the order shown) into an initially empty 2-D tree.

   (53, 14), (27, 28), (30,11), (67,51), (70, 3)

4. Insert the following triples (in the order shown) into an initially empty 3-D tree.

   (16, 8, 12), (18, 7, 15), (10, 9, 3), (13, 8, 9), (20, 10, 6), (3, 10, 7), (12, 14, 6)