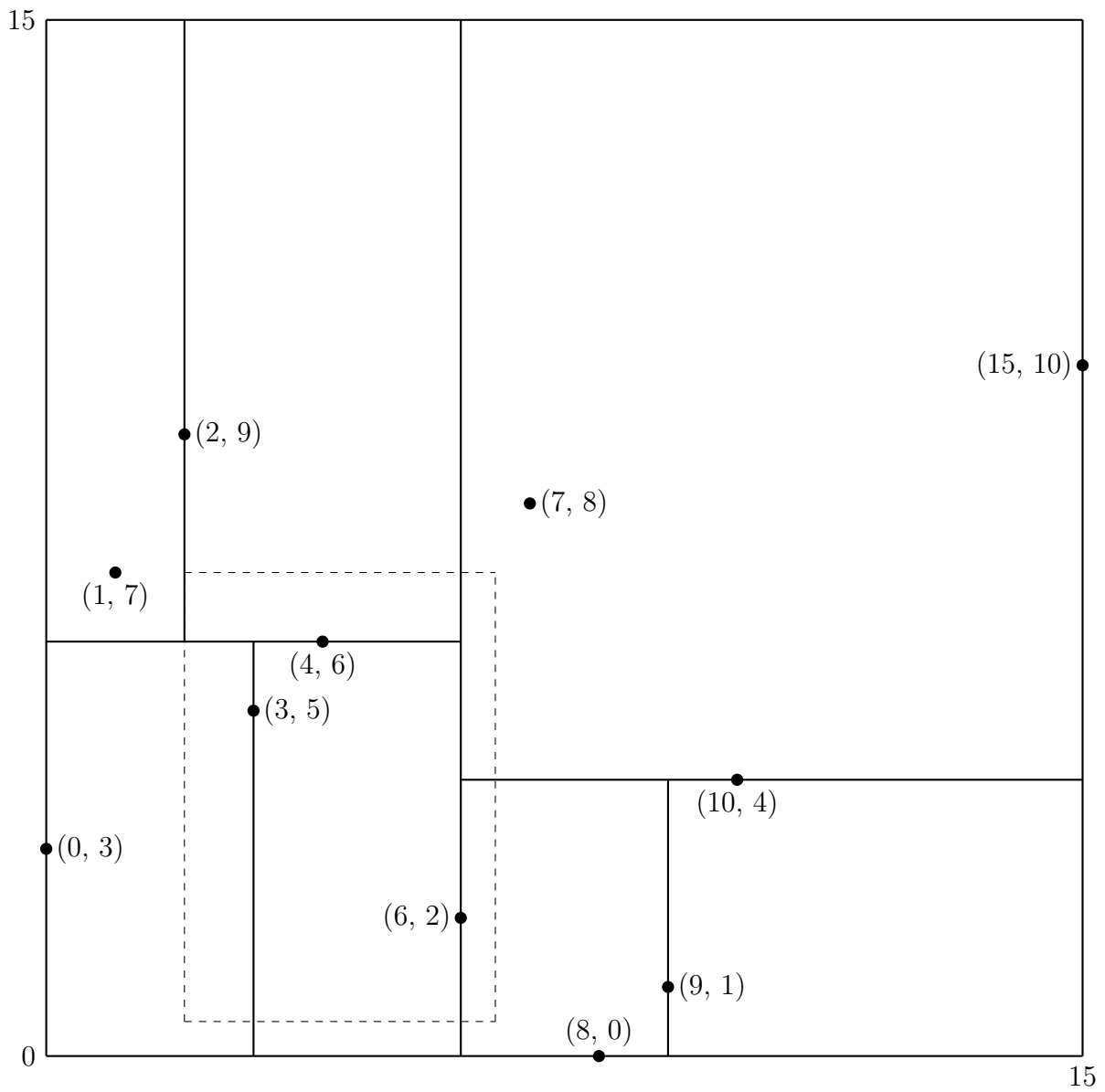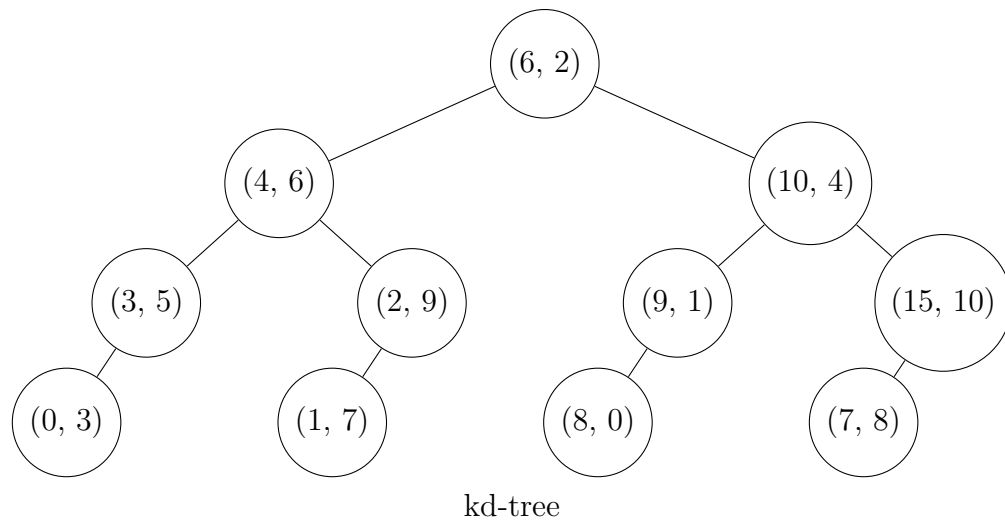# Q2 (a)

Plane partition diagram

Dashed region shows the query rectangle from part b.

1

kd-tree

(b)

All the nodes would be traversed through in the following order: $(6, 2) \rightarrow (4, 6) \rightarrow (3, 5) \rightarrow (0, 3) \rightarrow (2, 9) \rightarrow (1, 7) \rightarrow (10, 4) \rightarrow (9, 1) \rightarrow (8, 0) \rightarrow (15, 10) \rightarrow (7, 8)$.

The returned nodes would be (6, 2), (4, 6), (3, 5).