

Algorithm Design
M. T. Goodrich and R. Tamassia
John Wiley & Sons
Solution of Exercise R-14.2

T is a valid (a, b) tree for $2 \leq a \leq \min\{5, (b+1)/2\}$ and $b \geq 8$. For example, T could be a $(4, 8)$ tree, a $(5, 9)$ tree, but not a $(5, 8)$ tree.