Definition; not in book

An alternate definition of 'middle' of a tree.

For every vertex v of degree 2 or more, count the number of vertice in each subtree along each of the edges joining the vertex v. Let n_v be the maximum of those numbers.

For a tree with n vertices:
If one vertex v has $n_v \leq \frac{1}{2}(n-1)$ then v is the **centroid**.
If two adjacent vertices $n_v = n_w = \frac{1}{2}n$ then vw is the **bicentroid**.