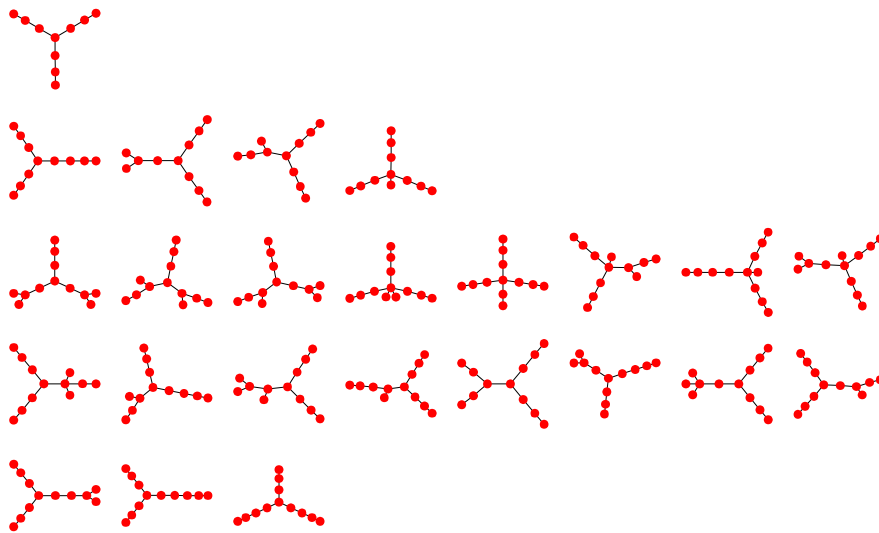


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Lobster Graph



A lobster graph, lobster tree, or simply "lobster," is a tree having the property that the removal of leaf nodes leaves a caterpillar graph (Gallian 2007). The numbers of lobsters on $n = 1, 2, \dots$ are 1, 1, 1, 2, 3, 6, 11, 23, 47, 105, 231, 532, 1224, 2872, ... (OEIS A130131), and the corresponding numbers of nonlobsters are 0, 0, 0, 0, 0, 0, 0, 0, 0, 1, 4, 19, 77, 287, ... (OEIS A130132; the first few of which are illustrated above). Precomputed properties of a number of lobster trees are implemented in the Wolfram Language as `GraphData["Lobster"]`.

SEE ALSO

Banana Tree, Caterpillar Graph, Polyiamond, Tree

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More things to try:



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Lobster Graph

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