Second Hint for Problem 199-e

Write down the picture (using xs) of a tree on five vertices with two vertices of degree one, of one with three vertices of degree one, and with four vertices of degree 1. Factor $x_1x_2x_3x_4x_5$ out of the picture and look at what is left. How is it related to your vertices of degree one? Now remove the vertices of degree 1 from the tree and write down the picture of the tree that remains. What is special about the vertices of degree 1 of that tree. (You can just barely learn something from this with five vertex trees, so you might want to experiment a bit with six or seven vertex trees.)