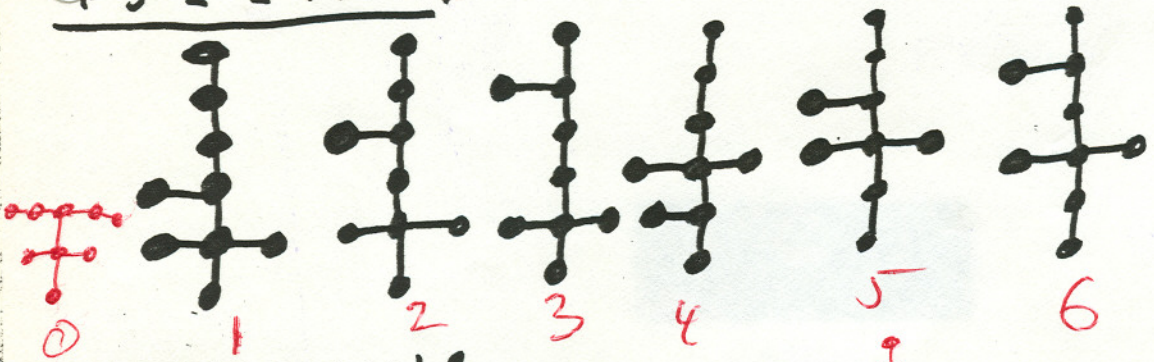
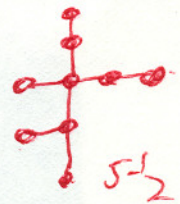
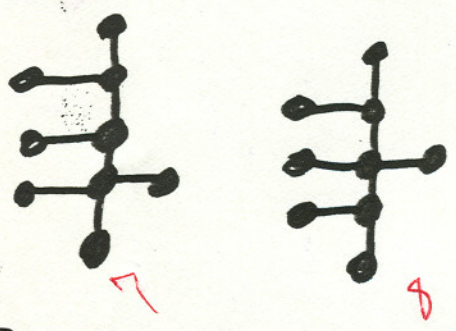


16 Draw as many non-isomorphic trees as possible which have 9 vertices where one vertex has degree 4 and another vertex has degree 3.

3 2 2 1 1 1 1!



4 3 3 1 1 1 1 1!



7 A store has 3 large bins containing candy: chocolate, vanilla, and strawberry. The owners decide to sell bags containing 6 pieces of candy. How many different types of bags of candy can they create? (Note: two bags of candy are considered to be the same type if they have the same number of chocolate pieces, the same number of vanilla pieces and the same number of strawberry pieces.)

ans = # of words with 6 r's and 2 s's

$$= \binom{8}{2}$$