

Answer on Question #76888 – Math – Discrete Mathematics

Question

Describe two situations that can be modelled with a tree. Describe the graph model that you will use.

Solution

1. Hierarchical relationships in armed forces. Let people be the vertices of a tree. Connect them if one of them is the closest (the one with the highest rank) who obeys the other (like cadet and lieutenant and so on). So the first level will consist of marshals, second of generals and so on.
2. Cell division. Let cells be vertices. Connect cell A with cells that appeared after the A's division. (In case of cells splitting into two new cells the tree will become binary).