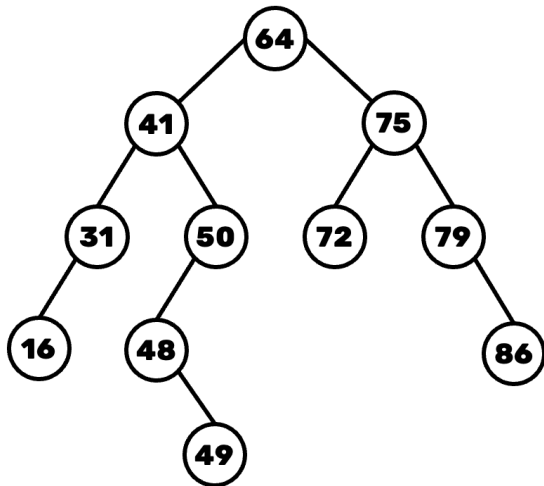


ÁRVORE BINÁRIA DE PESQUISA | RESOLUÇÃO

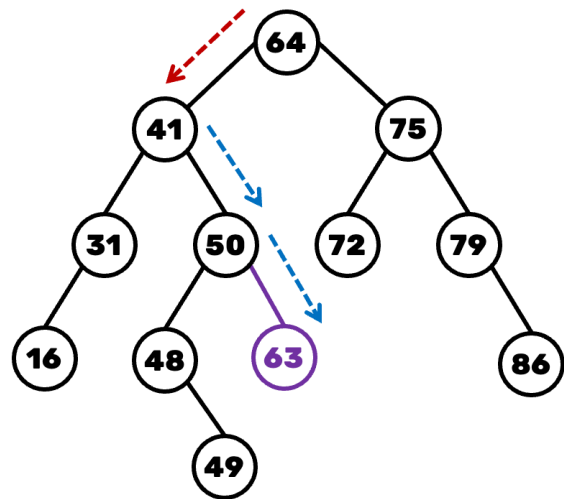
1. Construa uma Árvore Binária de Pesquisa (ABP) com os seguintes dados na ordem:

64, 41, 75, 31, 72, 79, 86, 50, 16, 48, 49

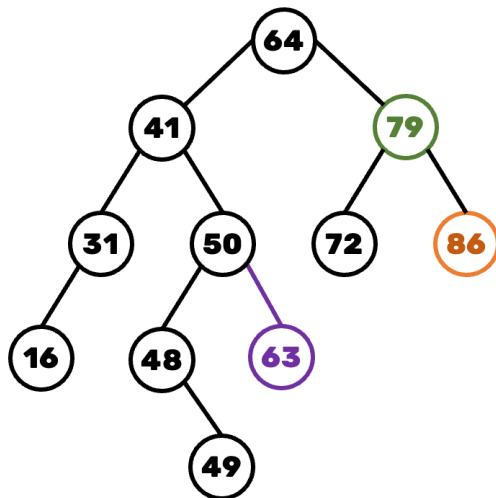
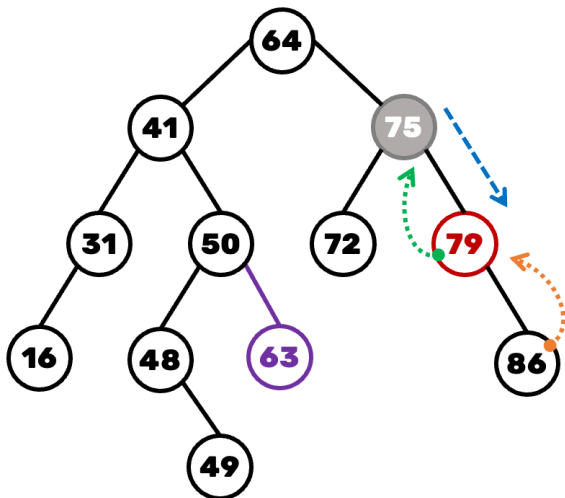


2. Partindo da ABP anterior, faça as operações na ordem em que aparecem e mantendo as ações de maneira cumulativa.

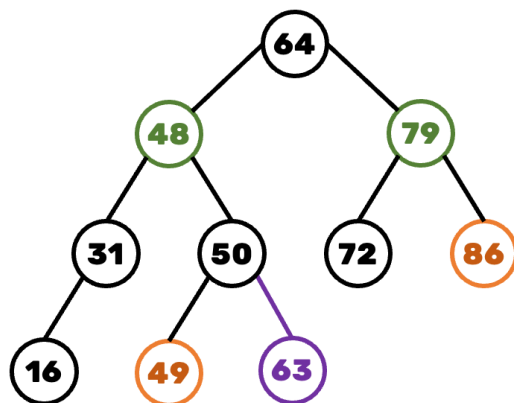
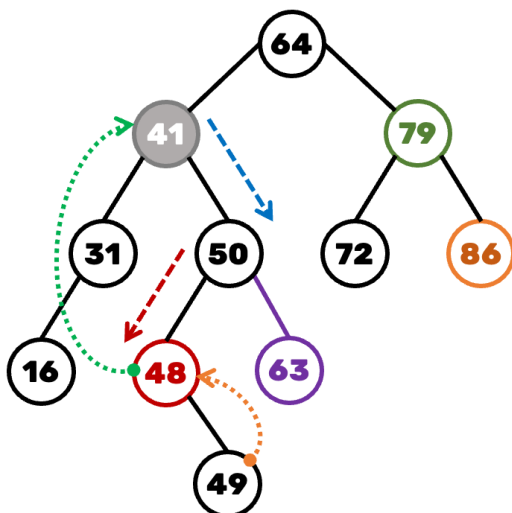
a) inserir(63)



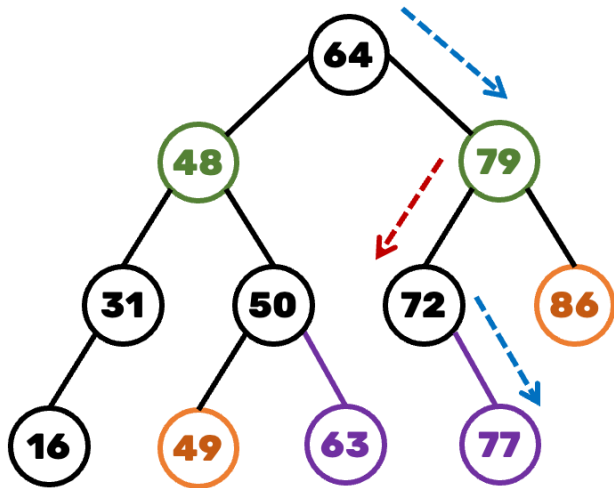
b) remover(75)



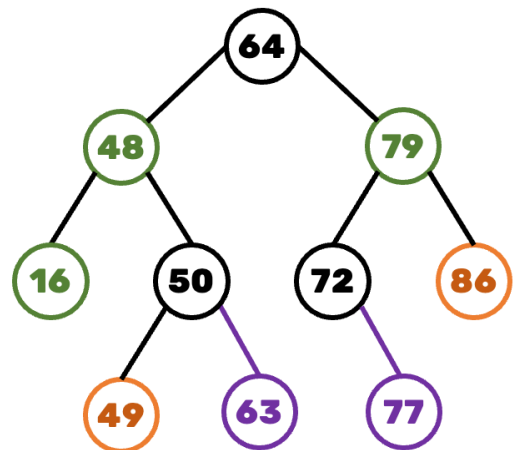
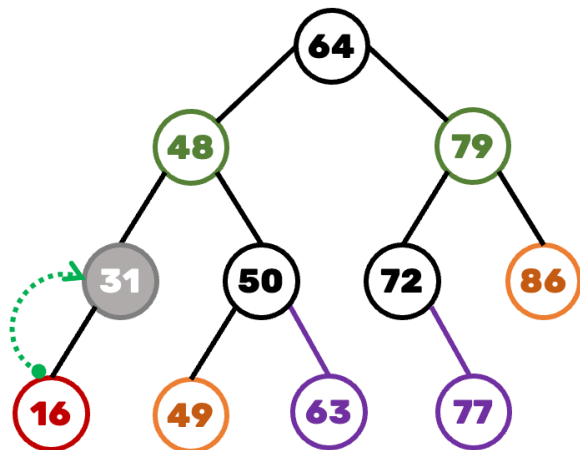
c) remover(41)



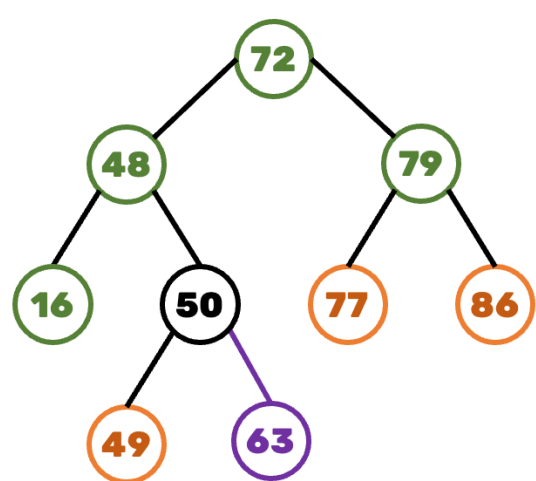
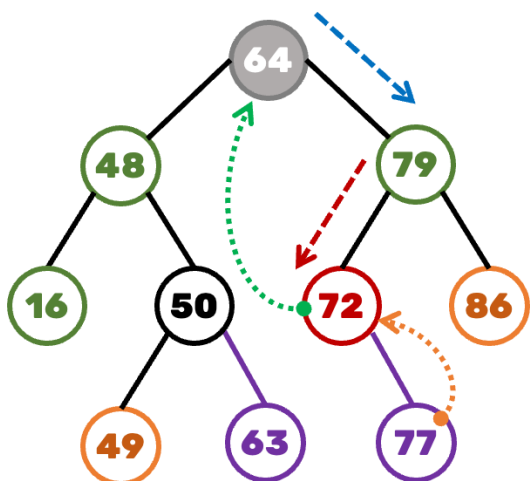
d) inserir(77)



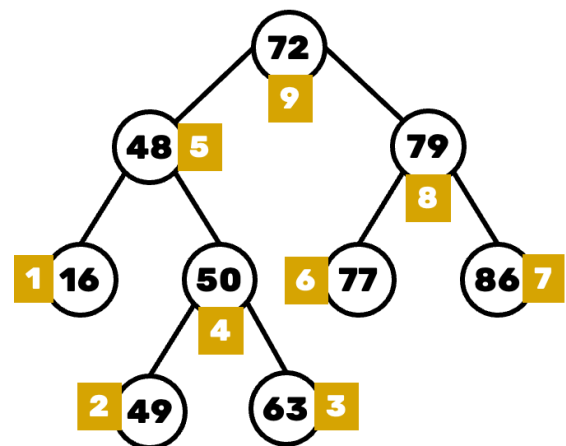
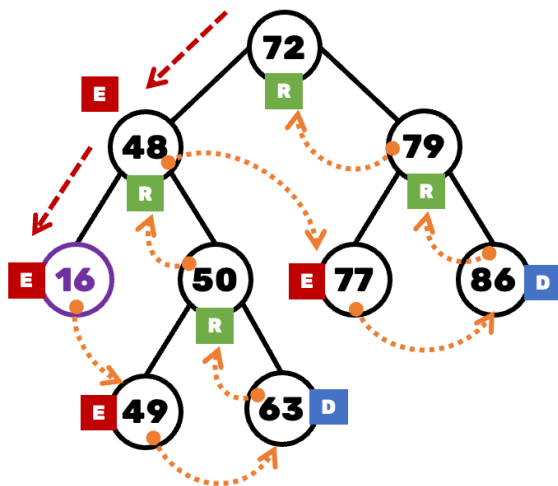
e) remover(31)



f) remover(64)

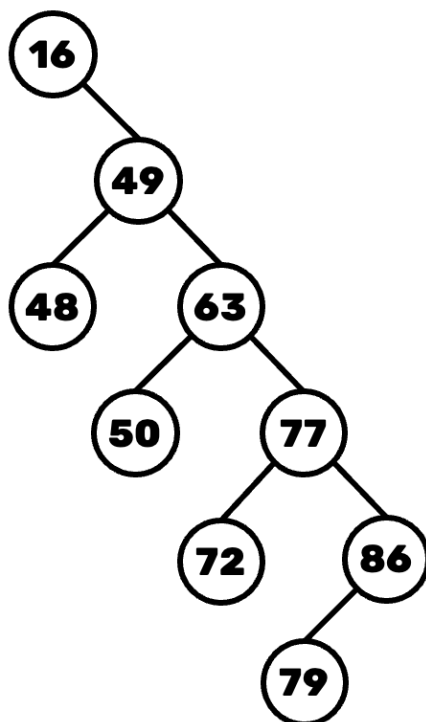


3. Apresente os dados da ABP resultante fazendo o caminhamento pós-ordem:

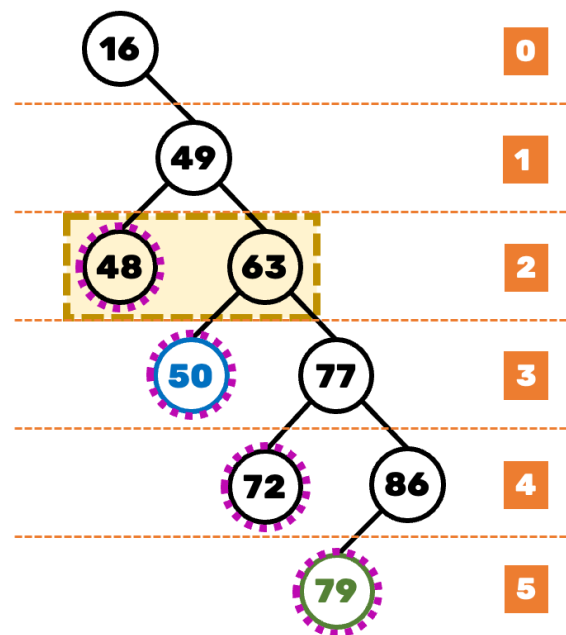


16 49 63 50 48 77 86 79 72

4. Com o resultado dos exercício anterior, construa uma nova Árvore Binária de Pesquisa, percorrendo a lista iniciando pelo primeiro elemento e seguindo até o último.



5. Apresente as seguintes informações sobre a nova árvore:



- a) Qual o grau da árvore? **2**
- b) Qual o nível da árvore? **5**
- c) Quantos nodos folhas a árvore tem? **4**
- d) Qual o grau do nodo de valor 79? **0**
- e) Qual o nível do nodo de valor 50? **3**