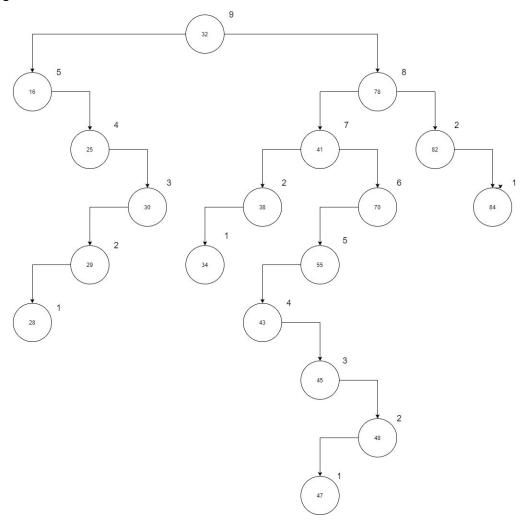
# **TPO Enunciado 3**

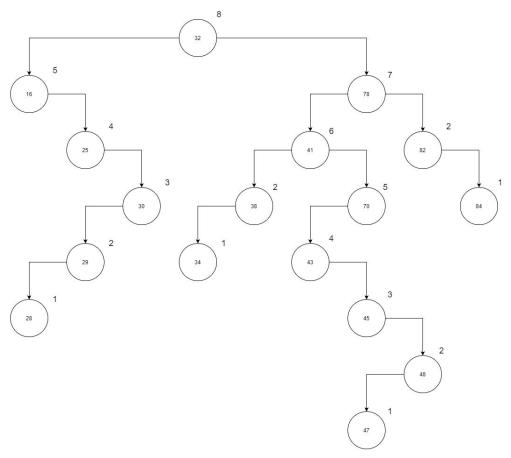
1. Para cada uno de los árboles vacíos ABB , AVL, B vacío, realizar la siguiente secuencia de operaciones

#### a. ABB

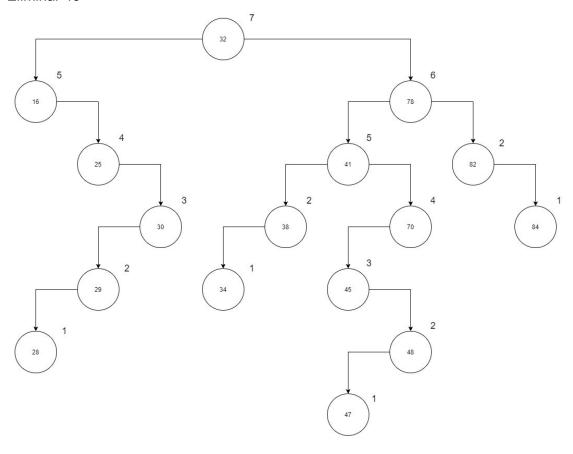
Agregar: 32, 78, 41, 70, 16, 55, 43, 38, 25, 82, 45, 34, 30, 29, 48, 28, 47, 84



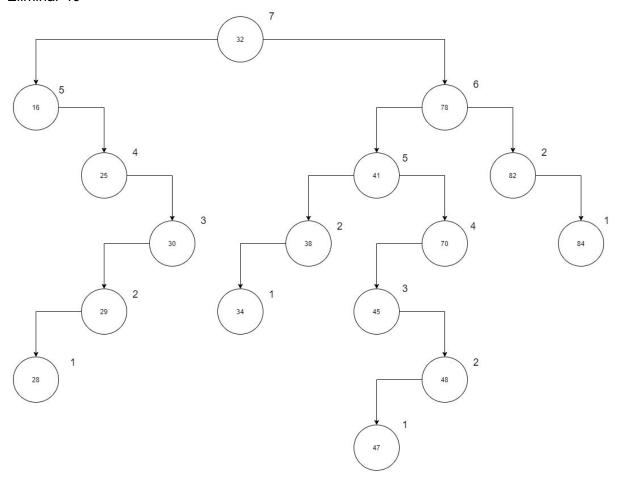
Eliminar 55



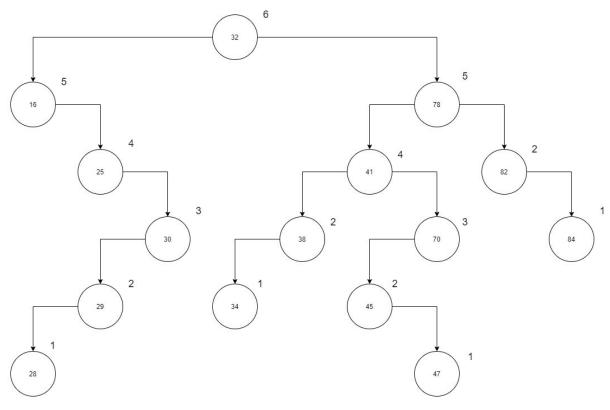
#### Eliminar 43



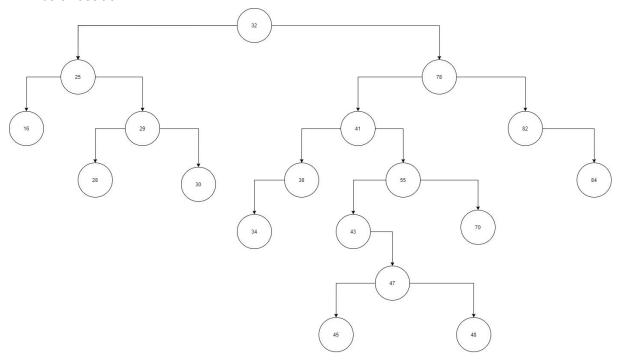
Eliminar 40



#### Eliminar 48

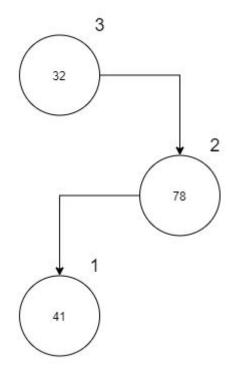


#### ABB balanceado

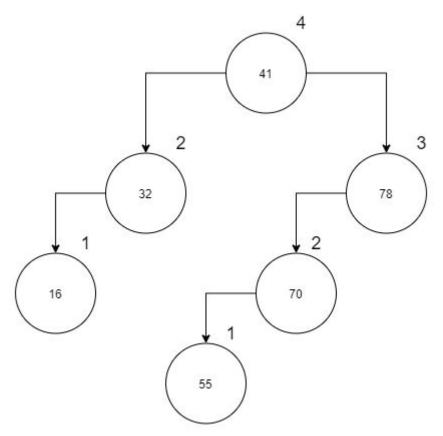


# b. AVL

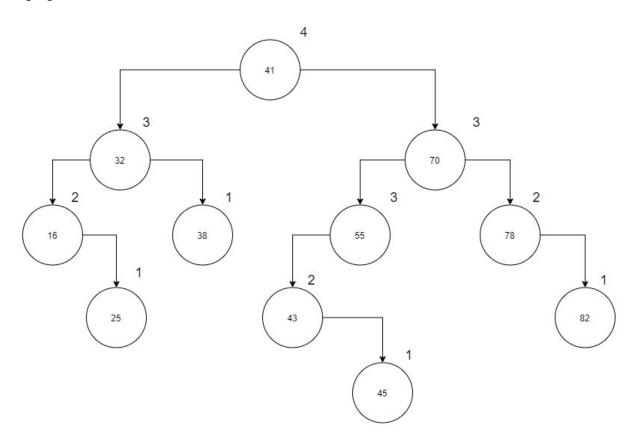
## Agregar 32, 78, 41



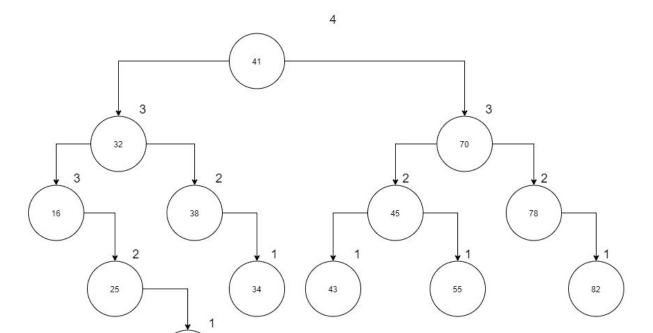
Agregar 70, 16, 55



Agregar 43, 38, 25, 82

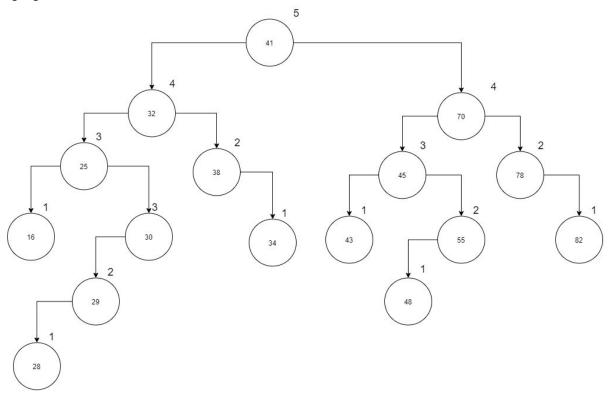


Agregar 34, 30

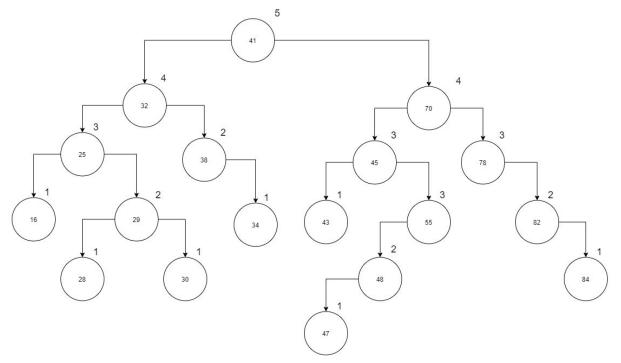


Agregar 29, 48, 28

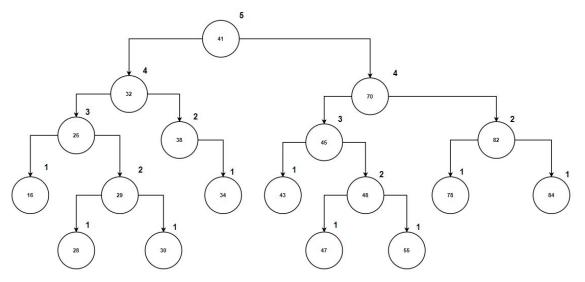
30



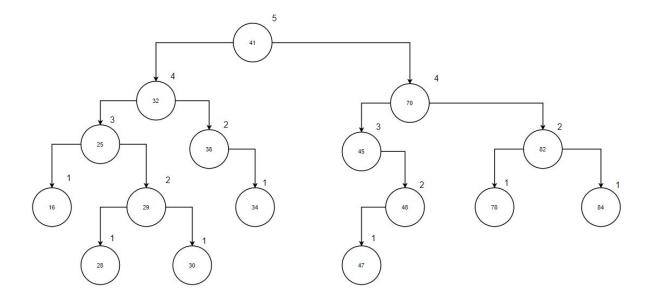
Agregar 47, 84



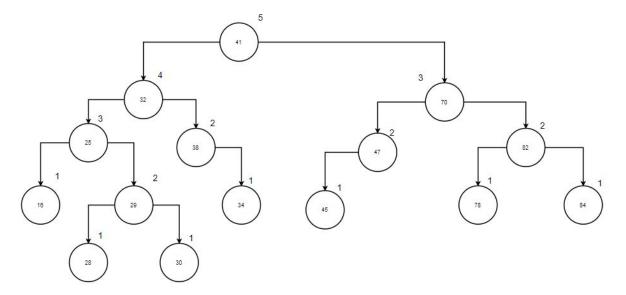
#### Balanceamos



Eliminar 55, 43

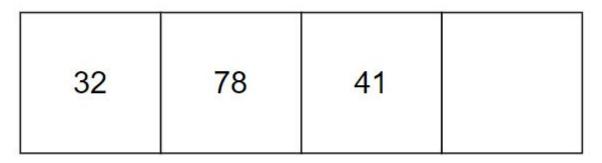


Balanceo; Eliminar 40, 48



#### c. Arbol B

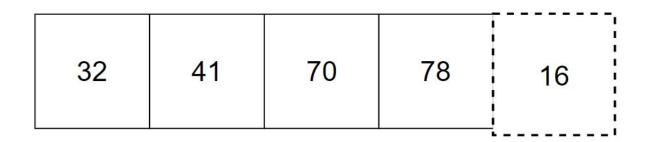
Agregar 32, 78, 41



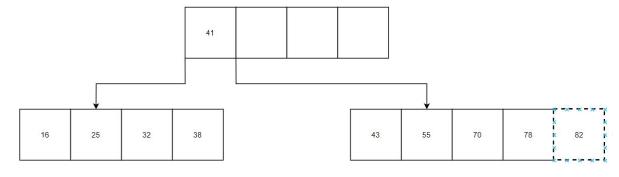
Ordenamos; Agregar 70

32	41	78	70
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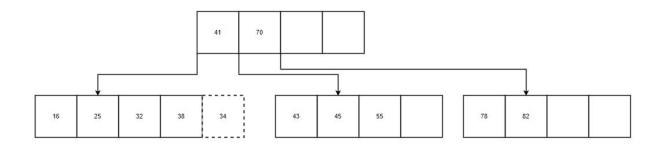
Ordernamos; Agregar 16



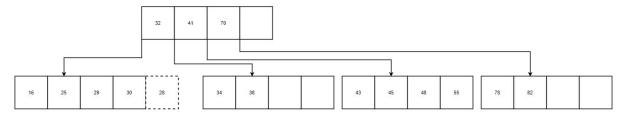
Ordenamos; Agregar 55, 43, 38, 25, 82



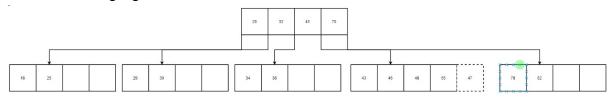
Ordenamos; Agregar 45, 34



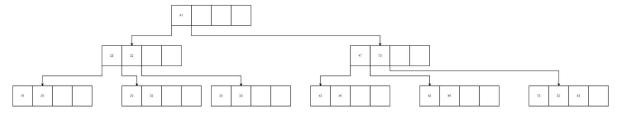
#### Ordenamos; Agregar 30, 29, 48, 28



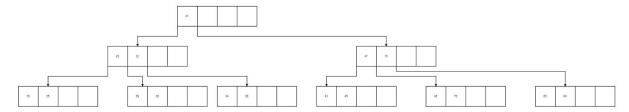
## Ordenamos; Agregar 47



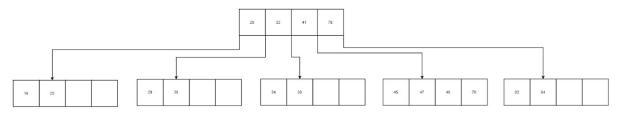
#### Ordenar; Agregar 84



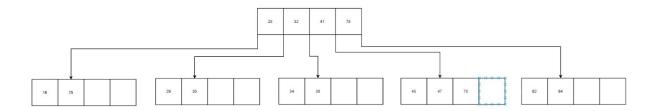
#### Eliminar 55



#### Eliminar 43

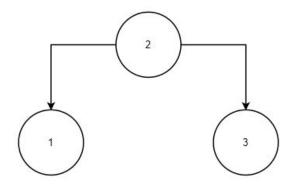


#### Eliminar 40, 48



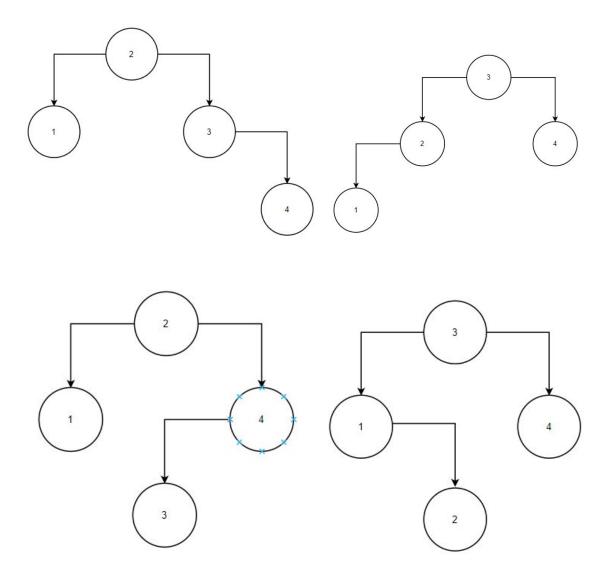
- 5) Responder y justificar el siguiente cuestionario
  - a) ¿Cuántos árboles diferentes AVL pueden generarse si se insertan los valores 1, 2, 3 en un árbol vacío AVL?

Solo puede generarse un árbol



b) ¿Cuántos árboles diferentes AVL pueden generarse si se insertan los valores 1, 2, 3, 4 en un árbol vacío AVL?

Pueden generarse 4 árboles



# c) ¿Cuántos árboles diferentes AVL pueden generarse si se insertan los valores 1, 2, 3 en un árbol vacío AVL?

Pueden generarse 5 árboles distintos

