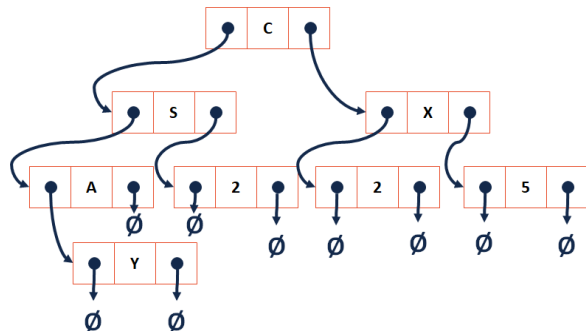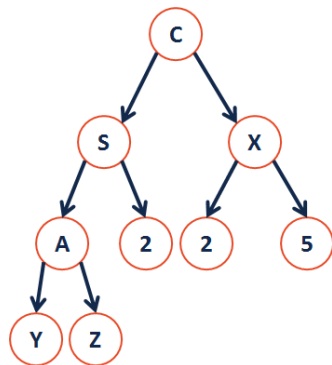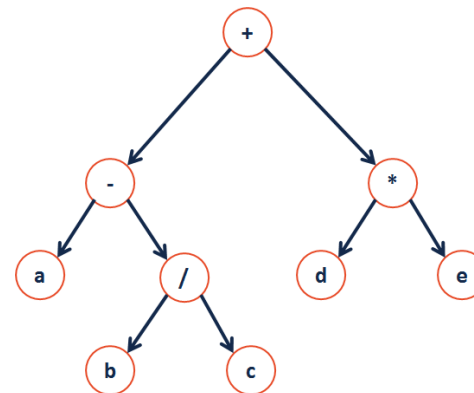## Trees are nothing new – they're fancy linked lists:

Theorem: If there are n data items in our representation of a binary tree, then there are _____ **nullptr**s.
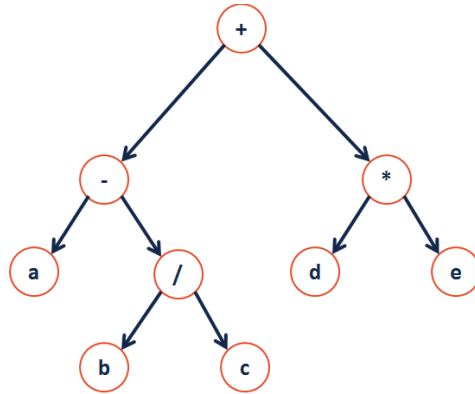

Traversals:

One Algorithm, Three Traversals:

BinaryTree.cpp
50 `void BinaryTree<T>::▮▮▮Order(TreeNode * cur) {`
51 `  if (cur != nullptr) {`
52
53
54
55
56
57 `    }`
58 `}`

A Different Type of Traversal

Strategy:

BinaryTree.cpp

```cpp
void BinaryTree<T>::levelOrder(TreeNode * croot) {



}
```
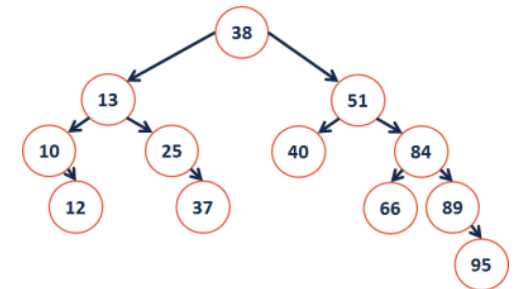
Traversal vs. Search:

Breadth First Search:

Depth First Search:

Dictionary ADT

Dictionary.h

```cpp
1   #pragma once
2
3
4
5   class Dictionary {
6     public:
7
8
9
10
11
12
13
14     private:
15       // ...
16   };
```

A Searchable Binary Tree?

BST.h

```cpp
private:




```

CS 225 – Things To Be Doing:

1. Theory Exam 2 starts next Thursday *(10 days from now)*
2. MP3 extra credit deadline tonight
3. Upcoming Lab: lab_trees
4. Daily POTDs