

Name : _____ Date : _____

A+ Binary Tree WorkSheet 3

Part 1 : Show the output of each block of code below.

1. What is the output?

```
TreeNode x = new TreeNode(34,
                           new TreeNode(13, null,null),
                           new TreeNode(57, null,null));

out.println(x.getValue());
out.println(x.getLeft().getValue());
out.println(x.getRight().getValue());
```

2. What is the output?

```
TreeNode y = new TreeNode("50",
                           new TreeNode("25",
                                           new TreeNode("15", null,null),
                                           new TreeNode("35", null,null)),
                           new TreeNode("70", null,null));

out.println(y.getValue());
out.println(y.getLeft().getValue());
out.println(y.getRight().getValue());
out.println(y.getLeft().getRight().getValue());
out.println(y.getRight().getLeft());
```

Part 2 : Complete method countNodes().

```
//method countNodes will count how many nodes are present in tree t
public static int countNodes(TreeNode t)
{
```

```
}
```

Example

```
//original tree
      10
     /  \
    7    20
   / \  / \
  2  9 14

countNodes = 6
```