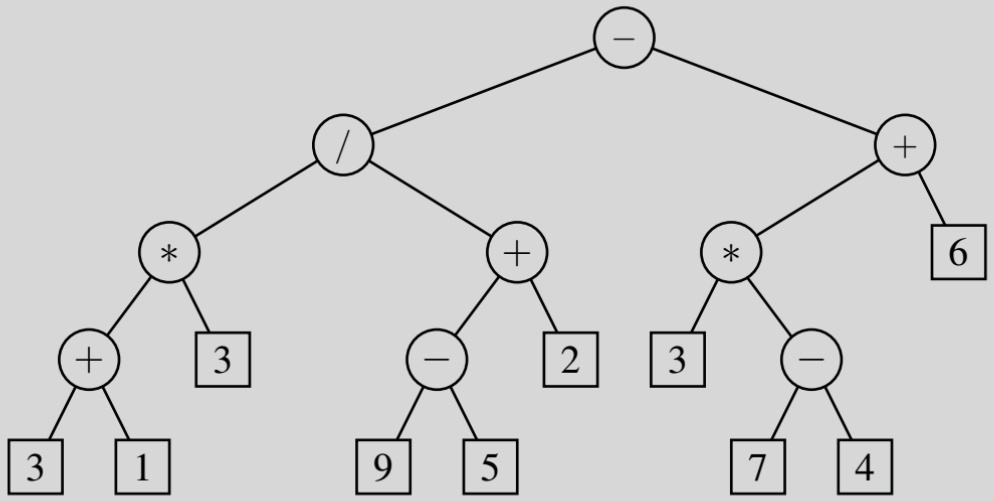

Figure 8.6: A binary tree representing an arithmetic expression. This tree represents the expression $((((3+1)*3)/((9-5)+2))-((3*(7-4))+6))$. The value associated with the internal node labeled "/" is 2.

Homework 4:

1. Create a binary tree similar to the one above with the values of the integers being random integers between 1 and 100;
2. Traverse the tree, and compute the values at each internal node.
3. Print the tree using an in order traversal
4. Submit your java program and a copy of the output from 3 above (include this as a comment in your program).

5. Your tree can be linked based or array based. You do NOT have to implement the book's binary tree ADT, use what you can from Java's collection framework.

6. Extra credit option: produce a listing that looks like the tree above with your random values (you don't need the circles and square or the links between the nodes) just the values and their positions relative to each other.

   For example:
   ```
            12
        4       3
      3   1
   ```
   Could represent part of the above tree.