**PART 3, written (To turn in)**

Give an analysis for the towers of hanoi. Turn in a recurrence equation and find a tight big-oh. Think about how the

analysis of towers compares with your recursive functions of part 1 (no turn in).

(Hint: The summation from i=0 to n of 2i, that is,20 + 21 +22 + ... +2n  =2n+1 – 1 .)

public static void towersOfHanoi(

int n,

IntStack from,

IntStack interim,

IntStack to)

{

if (n <= 0)

{

return;

}

towersOfHanoi(n - 1, from, to, interim);

towersOfHanoi(n - 1, to, interim, from);

}

**Recurrence equation:**

For example:

QED: