**By Master theorem: given**

We know that by comparing *a = 9*, *b = 3*, and

Then , where is a constant and

If then

**By using direct unwinding method given recurrence equation**

***1***.

Let

Simplify

Simplify

***2***.

Substitute into ***1***

Simplify

Put in T(n)

Simplify

***3****.*

**From *1*,*2*, and *3***

Let n = k, and k = log3n

**Answer = T(n) = 32 log3n + n∑ \* 3log3n**