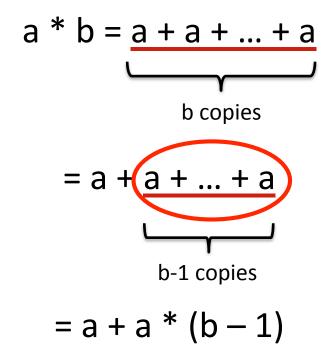
## Recursive version

 An alternative is to think of this computation as:



## Recursion

- This is an instance of a recursive algorithm
  - Reduce a problem to a simpler (or smaller) version of the same problem, plus some simple computations
    - Recursive step
  - Keep reducing until reach a simple case that can be solved directly
    - Base case
- a \* b = a; if b = 1 (Base case)
- a \* b = a + a \* (b-1); otherwise (Recursive case)

```
def recurMul(a, b):
if b == 1: Base case
    return a
else: Recursive step
return a + recurMul(a, b-1)
```