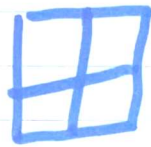


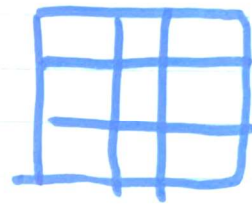
## Lesson 6-11 → Quadratic Patterns



step 1



Step 2



step 3

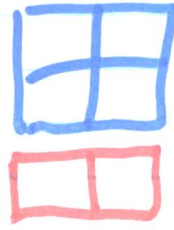
$$S(n) = n^2$$

$S(n)$  = total number  
of small blocks

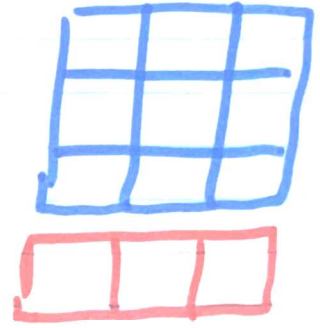
$n$  = Step number



Step 1



Step 2



Step 3

$$S(n) = n^2 + n$$



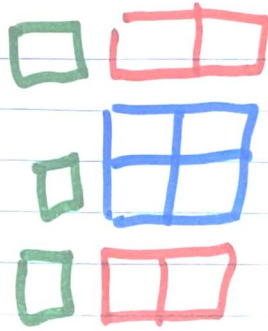
one  
growing  
square



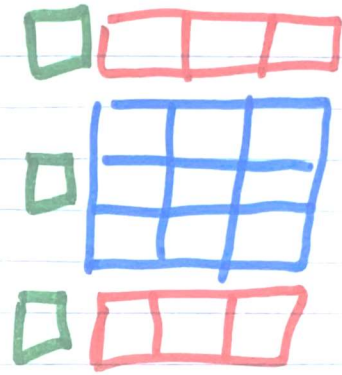
one  
growing  
line



step 1



Step 2



Step 3

$$S(n) = n^2 + 2n + 3$$

↑  
growing  
square

↑  
two  
growing  
lines

↑  
three  
CONSTANT  
blocks