

Exercise:

Your first exercise is to use the Russian Peasant's Algorithm to multiply **by hand**:

68 x 139

Half (throw away remainder)	Double
68	139
34	278
17	556
8	1112
4	2224
2	4448
1	8896
Total	$556 + 8896 = 9452$

Exercise

Count the instructions below in the psuedocode algorithm below and add them up to see how this algorithm performs.

arrayMax function	Finds the biggest integer in an array
Input: an array A of N integers	
Output: maximum element of A	
arrayMax(A, n) {	1
currentMax = A[0]	2
For (i=0; i < A.length; i++){	$1 + N + 1 + N$
If (A[i] > currentMax) then	$2N$
currentMax = A[i]	$2(N - 1) = 2N - 2$
}	
Return currentMax	
End function	

Total: T(N)	$6N + 3$