Linear search :

1. $i \leftarrow 0$ → 0
2. While $i < n$ and $A[i] \neq v$ → $4n$
3. $i \leftarrow i+1$ — $2(n-1)$
4. If $A[i] \neq v$ — n
5. Output "Not found" — 1
6. Else — 0
7. Output "found" → 1

$T(n) = 4n + 2(n-1) + n + 1 + 1$

$\Rightarrow 4n + 2n - 2 + n + 2$

$\Rightarrow 7n$

$T(n) = 7n \quad n > 0 \quad g(n) = n$

So $T(n)$ is $O(n)$.