Inductive hypothesis, continued

Recall that

- $f(n, m) = n + m$ if $n = 1$ or $m = 1$,
- $f(n, m) = f(n - 1, m) + f(n, m - 1)$, otherwise

We can't do induction on n because $f(n, m)$ depends on $f(n, m - 1)$.

We also can't do induction on m because $f(n, m)$ depends on $f(n - 1, m)$.