

Write $f(n) = \sum_k F(n, k)$



Is the sum definite or indefinite?

definite

indefinite

Apply Zeilberger's algorithm (zb) of degree 0

Apply Zeilberger's algorithm (zb)

Increase recurrence degree

no recurrence

finds recurrence

finds recurrence

No Solution

Use Telescoping Sum

Linear?

linear

nonlinear

Solve linear recurrence

Solve polynomial recurrence with Rsolve

Some recurrences found

no recurrences found

Fit to initial conditions

Fit to initial conditions

Success

No Solution

