Fibonacci Inequality Two

$$f(0) = 1; \quad f(1) = 1$$
$$f(n) = f(n-1) + f(n-2) \text{ for all } n \in \mathbb{N}, n \geq 2.$$

Show that $f(n) \geq 2^{n/2}$ for all $n \geq 2$ by induction.
[Define $P(n)$]
Base Cases:

Inductive Hypothesis:
Inductive step:

Therefore, we have $P(n)$ for all $n \geq 0$ by the principle of induction.

Even More Induction Practice: Sums

Let $P(n)$ be $\sum_{i=0}^{n} 2 + 3i = \frac{(n+1)(3n+4)}{2}$

Show $P(n)$ for all $n \in \mathbb{N}$ by induction on n.

Base Case ($n = 0$):

Inductive Hypothesis:

Inductive Step:

[Conclusion]