

Name: _____

Score:

1. Let $\{y_n\}_{n=1}^{\infty}$ be a sequence of real numbers $y_1 = y_2 = y_3 = 1$ and

$$y_n = y_{n-1} + y_{n-2} + y_{n-3}$$

for $n \geq 4$. Prove that $y_n < 2^n$ for all $n \geq 1$.