

Name: _____

(Supp-5) Let p_n denote the statement “ $4n - 1$ is divisible by 4”.

1. Show that $p_k \Rightarrow p_{k+1}$ for all $k \geq 1$.

2. Show that p_n is in fact false for all n .

3. Why do part (a) and part (b) not contradict one another?