Math 235 - Dr. Miller - Activity (DP #13-14): Induction with Expanded Form - Fall 2024

Imitate our earlier template to write a PMI proof that $11 + 19 + 27 + \cdots + (8n - 5) = 4n^2 - n - 3$ for all integers $n \geq$ (???) (where you determine a correct "base case").

Proof - (Introduction)

(Basis Step)

("IHOP")

(Inductive Step)

(Conclusion)

continued on back

Again imitate our template to prove via PMI that $15 \mid (14^{2n-3}+1)$ for all integers $n \geq$ (???) . (You must determine a correct Base Case.)

Proof - (Introduction)

(Basis Step)

("IHOP")

(Inductive Step)

(Conclusion)