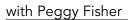
Foundations of Programming: Discrete Mathematics





Challenge

- 1. Prove: If 3x + 5 is an odd integer, then x is an even integer. (Proof by contrapositive)
- 2. Prove: If the square of an integer x is even, then x is even.
- Prove: For all integers, n, n² + n + 1 is odd.
 (Hint: Use proof by cases, where one case starting with n is even, and the second case starting with n is odd.)