In-Class Worksheet
Discrete Math & Functional Programming— CSCI 054— Fall 2024
Instructor: Osborn

Claim: no positive integer is expressible in two different ways as the sum of two perfect squares

write in decimal	write in binary
1	3
10	8
100	10
1011	22
1100	37
10101	47

Claim: If a number is odd, then its binary representation ends with a 1.

Claim: Let n be any integer. Then n is even if and only if n^2 is even.