

CIS 160

Recitation Guide - Week 2

Topics Covered: Proofs, Counting

Problem 1: Show that for any two integers m and n , $m^2 + n^2$ has the same parity as $m + n$.

Problem 2: Your favorite pizza place in the world, Elyssa's Pizzeria, is known for its variety of different pizzas. Elyssa's has 5 different kinds of tomato sauces and 6 different kinds of cheese. In addition, you can add one of any 20 different toppings, which are optional. On top of all of these choices, you can choose a thin crust or a thick crust. How many different pizzas can you possibly order from Elyssa's?