True/False - No explanation needed. (2pts)

1. If a set S is infinite, then the number of subset of S, $|\mathcal{P}(S)|$, is also infinite. True/False

2. To find how many positive integers $\leq n$ are divisible by d we calculate the fraction $\frac{n}{d}$ and round down in order not to miss any numbers. True/False

Problems - Need justification. No justification means **zero**!

1. How many license plates can be made using either four digits followed by four uppercase English letters or four uppercase English letters followed by four digits? (5pts)

2. How many 4-digits numbers that contain at least one 0? (5 points)