

Hint for Problem 365

You've probably already seen that, with small values of n , sometimes n^2 and sometimes 2^n is bigger. But if you keep experimenting one of the functions seems to get bigger and stay bigger than the other. The number $n = b$ where this change occurs is a good choice for a base case. So as not to spoil the problem for you, we won't say here what this value of b is. However you shouldn't be surprised later in the proof if you need to use the assumption that $n > b$.