Math 7
Spring 2012
The Coffee Proof

Claim: No amount of coffee is enough to wake me up in the morning.

Proof: I prove by induction on n that for every natural number $n \geq 1$, it is true that n drops of coffee are not enough to wake me up in the morning.

Base Case: One drop of coffee makes no difference in how I feel, so one drop of coffee is not enough to wake me up.

Inductive Case: Assume that n drops of coffee are not enough to wake me up in the morning. One more drop isn't going to make any difference, so $n + 1$ drops of coffee are not enough, either.

QED