Proof By Contradiction Skeleton

Suppose, for the sake of contradiction $\neg p$

…

q

…

$\neg q$

But q and $\neg q$ is a contradiction! So we must have p.

Another Proof By Contradiction

Claim: There are infinitely many primes.

Proof:

Just the Skeleton

"For all integers x, if x^2 is even, then x is even."

Just the Skeleton

"There is not an integer k such that for all integers n, $k \geq n$.