MATH 3012 Applied Combinatorics: The Pigeonhole Principle

1. The Pigeonhole Principle states that:

A. If n pigeons are placed in m holes, with $n > m$, then at least one hole must contain two pigeons.
B. If n pigeons are placed in m holes, with $n < m$, then at least one hole must be empty.
C. If n pigeons are placed in m holes, with $n > m$, then at least one hole must be empty.
D. If n pigeons are placed in m holes, with $n < m$, then at least one hole must contain two pigeons.

Answer Key: A