Reading Quiz Ch 3.6.1-3.6.3

1) **Mathematical analysis** uses concrete observational data.
   A. True
   B. False

2) The **step counting** method for analyzing efficiency is based on which model of computing?
   A. Lambda calculus
   B. the standard model
   C. the Turing model

3) An algorithm will always have different step counts for instances of different sizes.
   A. True
   B. False

4) If an algorithm's pseudocode has an if-else branch
   A. The algorithm will only have one T(n) because only the worst-case execution branch will be counted.
   B. The algorithm may have more than one T(n) because every execution branch must be counted.
   C. The algorithm may have more than one T(n) because steps can only be counted for specific instances.

5) Loops always have a step count of n multiplied by some constant ≥ 1.
   A. True
   B. False