6. *a.* Every rational number is equal to a ratio of some two integers.

   b. There is a rational number that is not equal to a ratio of any two integers.

15. *a.* ∀ actions A, ∃ a reaction R such that R is equal and opposite to A.

    b. ∃ an action A such that ∀ reactions R, R is not equal and opposite to A.

38. There is a function that is continuous but not differentiable.