Exercise 32

Identify the following properties as either extensive or intensive.

- (a) volume
- (b) temperature
- (c) humidity
- (d) heat
- (e) boiling point

Solution

- (a) volume extensive (the more of a substance there is, the more volume there is)
- (b) temperature intensive (independent of the amount of a substance)
- (c) humidity (amount of water vapor in the air) extensive (the more water vapor in the air, the higher the humidity)
- (d) heat extensive (the more of a substance there is, the more area there is, which allows more heat to flow)
- (e) boiling point intensive (whether you have a bottle of water or an ocean, the boiling point of water is the same)