

Lesson 1 Review Problem Solutions**Problem # 1.1**

d. Ordinal scale; the cars are ranked but there is no measure for the distance between them.

Problem # 1.3

- a. The population is the set of units of interest to the TV executive, which is the set of all ABC nightly news viewers.
- b. The age (in years) of each viewer is the variable of interest.
- c. The sample must be a subset of the population. In this case, it is the 500 ABC nightly news viewers selected by the executive.
- d. The inference of interest involved the generalization of the information contained in the sample of 500 viewers to the population of all ABC nightly news viewers. In particular, the executive wants to estimate the average age of the viewers in order to determine whether it is less than 59 years. She might accomplish this by calculating the average age in the sample and using the sample average to estimate the population average.

Problem # 1.4

- a. This information can be viewed as representing the nominal scale of measurement if we view the stocks in terms of returning more versus not returning more than the rate that had been expected.
- b. This information can be viewed as representing the ratio scale of measurement. For example, a 40% rate for above-expected performance would be twice a 20% rate. There is an absolute zero, a unit of measurement (percentage point), and multiples are meaningful.