

2

Seven Basic Principles

SOLUTIONS

1. Use complete sentences to describe the relative sizes of the cities shown in table 2A.
“In 1995, the world’s largest city, Tokyo, had a population of 27 million people. With populations of roughly 16.5 million apiece, the next two largest cities, Mexico City and Sao Paolo, were only about 60% as large as Tokyo.”
3. For each of the following situations, specify whether you would use prose, a table, or a chart.
 - a. Table to show detailed figures and organize the 50 numbers.
 - b. Multiple line chart to illustrate approximate pattern.
 - c. Prose (memo).
 - d. Pie chart.
 - e. Prose (few sentences).
5. Identify terms that need to be defined or restated for a nontechnical audience. Answer shown in bold.
 - a. “The Williams family’s income of \$25,000 falls below **185% of the Federal Poverty Threshold** for a family of four, qualifying them for food stamps.”
 - b. “A population that is increasing at 2% per year has a **doubling time** of 35 years.”
7. Read the sentences below. What additional information would someone need to be able to answer the associated question?
 - a. How much does Brand Q (or Brand X) cost? How much money do you have?
 - b. How big is the door opening to your car? The headroom and legroom?
 - c. How many calories does Diet Fizzjuice (or Diet Limelite) have?
 - d. Where are you located? Is temperature being measured in degrees Fahrenheit or degrees Celsius?
9. “Figure 2A shows trends in daily crude oil production in the world’s four leading oil-producing countries during the 1990s. Over the course of that decade, Saudi Arabia consistently had the highest crude oil production, followed by Russia, the United States, and Iran. However, downward trends in production in the top three oil producing countries, coupled with steady production in Iran, led to a narrowing of the gap between those countries between 1990 and 1999. In 1990, Saudi Arabia produced 30% more oil than the United States and more than three times as much

as Iran (10 million, 7 million, and 3 million barrels per day, respectively). By 1999, Saudi Arabia's advantage had decreased to 25% more than the United States or Russia, and about twice as much as Iran."