map." Our opposing debater might object that this statement misrepresents the whole context of what Ahmadinejad actually said.

The opposing debater might also question whether support for Hezbollah and Hamas constitutes support for international terrorism. Iran's pursuit of nuclear power could be justified by its desire to acquire nuclear reactor technology. The hostage-taking incident in the 1980s came immediately following the overthrow of a brutal dictator and predated the establishment of the modern democratic government in Iran.

Sometimes the number of examples offered provides too small a sample from which to draw a conclusion. A debater could, for example, read a piece of evidence describing a heinous murder committed by an illegal immigrant before drawing a conclusion that illegal immigration is a major source of crime in America. The sample size is simply too small to support the conclusion. In properly conducted empirical studies, mathematical formulas are used to determine whether a finding is "statistically significant." The smaller the sample size, the less likely the researchers will arrive at a statistically significant result. In the context of argument, the same principle holds, though on a smaller scale. A single example rarely provides a convincing basis for inductive proof. In the foregoing Iran example, the arguer obviously felt the need to offer numerous instances of threatening behavior before drawing the conclusion that Iran is a threat to world peace and security.

Offering counter-examples is one of the means of opposing inductive argument claims. A debater could answer the claim that "Iran is a threat to world peace and security" by citing instances in which Iran has acted peacefully. The United Nations International Atomic Energy Agency reports that Iran is cooperating with its nuclear inspections and does not seem to be diverting nuclear materials. Iran is one of only a few countries in the Middle East where the government is democratically elected. Furthermore, Iran has agreed to meet with Bush administration officials over the issue of limiting the killing of civilians in Iraq.

A final test of inductive reasoning asks whether the examples are representative. Debate topics are chosen because they are controversial. This means that examples will be available to support both sides of the resolution. The key question is which examples are more representative or typical.

ABDUCTIVE REASONING

A third logical pattern is *abduction*—the framing of a hypothesis that best fits a set of facts. Aristotle's term for this form of reasoning was *apagoge*. Physicians use abduction when they ask a patient to describe his or her symptoms and then make a diagnosis as to