

- ▲ 10. Overheard: "You're not going to take a course from Harris, are you? I know at least three people who say he's terrible. All three flunked his course, as a matter of fact."
11. A majority of Ohio citizens consider the problem of air pollution critical. According to a survey taken in Cleveland, more than half the respondents identified air pollution as the most pressing of seven environmental issues, and as having either "great" or "very great" importance.
- ▲ 12. Comment: What are we getting for the billions we spend on these new weapons? Absolutely nothing. Just look at the Apache helicopter. I read where they can't fly one of them for more than ten hours without grounding it for major repairs.
13. The IRS isn't interested in going after the big corporations, just middle-class taxpayers like you and me. I was audited last year, and I know several people who have been audited. You ever hear of Exxon getting nailed?
14. I am totally outraged by the ethics of our elected representatives. Just look around: Bill Clinton accepted illegal campaign donations; Newt Gingrich was fined \$300,000 for misusing money. I tell you, they are all just a bunch of crooks.
- ▲ 15. When he was president, Ronald Reagan occasionally would wave a copy of the "Help Wanted" section of some newspaper to demonstrate that U.S. unemployment wasn't really so bad. What was the fallacy in this "argument"?

Exercise 11-21

- In the text, it is said that a person playing roulette has a disadvantage of about 5 percent compared with the house. Explain what this means.
- Choose two or three other gambling bets for which you can calculate or look up the odds against the bettor. (Stick with games of pure chance; those that can involve a bit of skill, such as twenty-one—also known as blackjack—are much more difficult to deal with.) Determine which bet gives the house the smallest advantage.
- Choose a state lottery and determine the odds against winning for a given ticket. Can you determine what kind of advantage the "house" has in such a gamble?

Exercise 11-22

- Explain in your own words what the law of large numbers says.
- "Over the long term, human births will approximate 50 percent males and 50 percent females." Is this a reasonable application of the law of large numbers?

3. A person is betting on flips of a coin. He always bets on heads. After he loses three in a row, you hear him say, "Okay, I'm due for one now!" as he raises his bet. Write a brief note in which you give him some friendly advice.

Writing Exercises

1. Which of the following general claims do you accept? Select one that you accept and write a one-page essay presenting evidence (giving arguments) for the claim. When you are finished, write down on a separate piece of paper a number between 1 and 10 that indicates how strong you think your overall "proof" of the general claim is, with 10 = very strong and 1 = very weak. Take about two minutes to complete your essay. Write your name on the back of your paper.

General claims:

You get what you pay for.

Nice guys finish last.

Everything else being equal, men prefer blondes.

Women are more gentle and nurturing than men.

Politicians are untrustworthy.

Government intrudes into our private lives/business affairs too much.

Too many welfare recipients don't deserve assistance.

College teachers are liberals.

Locks are dumb.

The superwealthy pay less in taxes than they should.

When everyone is finished, the instructor will collect the papers and redistribute them to the class. In groups of four or five, read the papers and assign a number from 1 to 10 to each one (10 = very strong, 1 = very weak). When all groups are finished, return the papers to their authors. When you get your paper back, compare the number you assigned to your work with the number the group assigned to it. The instructor may ask volunteers to defend their own judgment of their work against the judgment of the group. Do you think there is as much evidence for the claim you selected as you did when you argued for it initially?