

1. Many television viewers own videocassette recorders (VCR's). Companies that advertise on television complain that VCR ownership hurts their business, since a VCR makes it possible to view television programs without watching the commercials. Indeed, two-thirds of those who tape programs on a VCR edit out the commercials when viewing the programs.

Which of the following, if true, would most strengthen the companies' complaint that VCR ownership is currently hurting their business?

(A) The methods for determining audience size, which in turn determines charges for advertising time, count households that are merely recording a program as households that are watching it.

(B) VCR manufacturers who advertise on television would themselves suffer the damage, if any, to advertisers' interests that is caused by VCR's.

(C) There are VCR's that are in the early stages of development that will automatically edit out commercials during the recording process.

(D) Those who tape programs on VCR's, but who do not edit out commercials when viewing the programs, tape more often than those who do edit out the commercials.

(E) Some television commercials are as entertaining or informative as the programs they interrupt

2. A chemical company claims that, since only one of 520 rats that were given high doses of a new artificial sweetener developed cancer while all the others remained healthy, the sweetener is not carcinogenic for human beings and ought to be approved for human consumption.

Which of the following, if true, most strongly supports the chemical company's claim?

(A) Chemicals that are carcinogenic for rats are usually also carcinogenic for other animals, such as guinea pigs, used in experiments.

(B) The spontaneous incidence of cancer in this particular strain of rat is approximately one in 540.

(C) Tests conducted on a certain strain of mouse show that, of 500 mice given a dose of sweetener similar to that given the rats, 53 developed cancer.

(D) Certain chemicals that are carcinogenic for human beings have been shown not to be carcinogenic for rats.

(E) The average lifespan of the strain of rat used in the experiment is 2 years; the chemical company terminated the experiment when the rats were 13 months old.

3. The Burmese ferret badger burrows its home in the ground. Based on the fact that different local populations of Burmese ferret badgers of the same species dig homes of different styles, zoologists have concluded that the badgers building styles are a culturally acquired, rather than a genetically transmitted trait.

Which of the following, if true, would most strengthen the conclusion drawn by the zoologists?

A. There are more common characteristics than there are differences among the Burmese ferret badger's styles of the local Burmese ferret badger population that has been studied most extensively.

B. Young Burmese ferret badgers are inept at digging burrows and apparently spend years watching their elders before becoming accomplished in the local style.

C. The homes of one species of badger lack the characteristics of the homes of most other species of badger.

D. Burmese ferret badgers are found only in Burma and India, where local populations of the badgers apparently seldom have contact with one another.

E. It is well known that the squeals of some badgers are learned rather than transmitted genetically.

4. A company has initiated a health program for its employees that enable the worker, free of charge, to receive a monthly massage treatment, consult with a dietician and attend lectures in healthy living. These programs increase worker productivity and reduce absenteeism. Therefore, these programs provide as much benefit to the company as they do to the employees.

Which of the following, if true, most significantly strengthens the conclusion above?

A. Health programs are often the most popular services offered to employees.

B. Studies have shown that such health programs are not effective for many people.

C. Regular massage treatments and dietary counseling reduce people's risk of catching a flu or a cold and provides them with increased energy.

D. Dizziness sometimes results from beginning a course of massage treatments.

E. Employee assistance programs require companies to hire people to supervise the various programs offered.

5. Donut Chain, wishing to increase the profitability of its new store, will place a coupon in the local newspaper offering a free donut with a cup of coffee at its grand opening. Donut Chain calculates that the cost of the advertisement and the free donuts will be more than recouped by the new business generated through the promotion.

Which of the following, if true, most strengthens the prediction that Donut Chain's promotion will increase the new store's profitability?

A. Donut Chain has a loyal following in much of the country.

B. Donut Chain has found that the vast majority of new visitors to its stores become regular customers.

C. Donuts at Donut Chain cost less than a cup of coffee.

D. Most of the copies of the coupon in the local newspaper will not be redeemed for free donuts.

E. Donut Chain's stores are generally very profitable.

6. Abolition of government regulation of airfares has increased competition among airlines and thus will eventually lead to compromises in airline safety. Anxious to reduce fares in what has, as a result of deregulation, become a highly competitive market, airlines will be tempted to reduce costs by decreasing safety inspections and routine maintenance of aircraft.

Which of the following, if true, would cast the most serious doubt on the prediction that deregulation of airfares will ultimately compromise airline safety?

(A) Consumers select an airline as much on the basis of its safety record as on the basis of its fares.

(B) There are a number of mechanical problems that cannot be detected in the routine inspection of aircraft.

(C) The amount of commercial air traffic has increased significantly since the regulation of airfares was abolished.

(D) The number of airline bankruptcies has increased since the regulation of airfares was abolished.

(E) When airfares were regulated, airlines were more inclined to invest in the development of new aircraft.

7. Dutch elm disease, which is caused by the fungus *C. ulmi* spread by adult scolytid beetles, has already destroyed 70 percent of the elms in Greenwood Forest. Another naturally occurring fungus, *P. oblonga*, kills larvae of the scolytid beetle. Forest rangers plan to introduce *P. oblonga* into Greenwood Forest in order to save the remaining mature elms.

Which of the following, if true, would cast the most serious doubt on the plan's prospects for success?

(A) During the last year, the scolytid beetle population in Greenwood Forest has decreased by 30 percent because of cold-weather conditions.

(B) Dutch elm disease cannot be abated by introducing chemical compounds used to arrest the diseases of many other species of tree.

(C) Introduction of *P. oblonga* saved elm trees in neighboring Gatamar and Lavemont forests.

(D) For *P. oblonga* to control scolytid beetles successfully, it must be established in a forest prior to the beetle infestation.

(E) Greenwood Forest has lost many maple trees because of a fungus infection.

8. Some manufacturers of computer software have proposed cutting costs by distributing instruction manuals for their programs on computer disk only, so that computer users can refer to them on a computer screen rather than having to deal with unwieldy printed manuals that are costly for manufacturers to produce.

Which of the following, if true, provides the best reason against adopting the proposal described above?

(A) Most computer users are just as comfortable using instructions on a computer screen as they are using printed manuals.

(B) Although instructions on a computer disk can be printed out cheaply using a computer printer, such printouts are less convenient to use than instructions displayed on a computer screen.

(C) Because they are expensive and inconvenient to copy, printed instruction manuals provide one of the best deterrents against the illegal copying of software, which costs manufacturers enormous profits.

(D) Instructions supplied on a computer disk are more appropriate for business and educational programs than for computer games and other entertainment software.

(E) Instructions supplied on a computer disk can be designed to provide more extensive and more easily utilized cross-references than those provided by printed manuals.

9. Researchers have concluded from a survey of people aged 65 that emotional well-being in adulthood is closely related to intimacy with siblings earlier in life. Those surveyed who had never had any siblings or who said that at college age they were emotionally distant from their siblings were emotionally less well adjusted at 65 than were those who had been close to at least one brother or sister.

Which of the following, if true, most seriously weakens the researchers' argument?

(A) As they get older, many people think more about their mortality and thus must confront feelings of loneliness and isolation.

(B) People suffering from the emotional distress of maladjustment usually remember being less intimate with other people than they actually were.

(C) Memory of one's past plays a greater role in the emotional well-being of older people than it does in that of younger people.

(D) Few people can correctly identify the true sources of their emotional well-being or of their emotional difficulties.

(E) Siblings are more likely to have major arguments and deep differences of opinion at college age than at any other time of their lives.

10. Recently political pressure groups have become far more effective at persuading industrial corporations to change. For example, as a result of the efforts of animal groups, many pharmaceutical and cosmetics companies have reduced their use of laboratory animals, substituting in their place alternative methods of product testing.

Which of the following, if true, casts the most serious doubt on the connection between pressure group activity and corporate change claimed above?

(A) Many companies in the pharmaceutical industry have increased their public relations spending in order to counter the activity of animal rights groups.

(B) Before the new methods of testing products are used, they have to be calibrated by comparison tests involving experiments on laboratory animals.

(C) When companies stop using laboratory animals, they generally go to some expense to publicize this change of policy.

(D) The pharmaceutical manufacturers who still use laboratory animals are mostly the smaller firms that have been less subject to pressure group activity.

(E) The methods of product testing that do not involve laboratory animals are faster and cheaper than the methods that do.