

**NEW CR QUESTIONS FROM OG 2017****PAGE 510, Q 546**

Candle Corporation's television stations are likely to have more income from advertisers than previously. This is because advertisers prefer to reach people in the 18- to 49-year-old age group and the number of people in the group watching Candle television is increasing. Furthermore, among Candle viewers, the percentage of viewers 18 to 49 years old is increasing.

Which of the following, if true, would most strengthen the argument that Candle Corporation will receive more income from advertisers?

- A) Advertisers carefully monitor the demographic characteristics of television audiences and purchase advertising time to reach the audiences they prefer to reach.
- B) Among people over 49 years old, fewer viewers of Candle stations buy products advertised on television than do viewers of other stations.
- C) There will be increasingly more advertisements on television that are directed at viewers who are over 49 years old.
- D) Candle stations plan to show reruns of television shows during hours when other stations run shows for the first time.
- E) People 18 to 49 years old generally have less disposable income to spend than do people over 49 years old.

**PAGE 512, Q 549**

During the earliest period of industrialization in Britain, steam engines were more expensive to build and operate than either windmills or water mills, the other practicable sources of power for factories. Yet despite their significant cost disadvantages, steam-powered factories were built in large numbers well before technical improvements brought their cost down. Furthermore, they were built even in regions where geographical conditions permitted the construction of wind- and water-powered factories close to major markets.

Which of the following, if true, most helps to explain the proliferation of steam-powered factories during the earliest period of industrialization in Britain?

- A) In many areas of Britain, there were fewer steam-powered factories than wind- or water-powered factories in the earliest period of industrialization.
- B) Unlike wind- or water-powered factories, steam-powered factories were fueled with coal, which sometimes had to be transported significant distances from the mine to the site of the factory.
- C) It was both difficult and expensive to convert a factory from wind power or water power to steam power.
- D) In the early period of industrialization, many goods sold in towns and cities could not be mass-produced in factories.
- E) In Britain, the number of sites where a wind- or water-powered factory could be built was insufficient to provide for all of the demand for factory-produced goods at the time.

**PAGE 515, Q 562**

Which of the following most logically completes the argument?

In a typical year, Innovair's airplanes are involved in 35 collisions while parked or being towed in airports, with a resulting yearly cost of \$1,000,000 for repairs.

To reduce the frequency of ground collisions, Innovair will begin giving its ground crews additional training, at an annual cost of \$500,000. Although this will cut the number of ground collisions by about half at best, the drop in repair costs can be expected to be much greater, since \_\_\_\_\_

- A) most ground collisions happen when ground crews are rushing to minimize the time a delayed plane spends on the ground.
- B) a ground collision typically occurs when there are no passengers on the airplane.
- C) the additional training will focus on helping ground crews avoid those kinds of ground collisions that cause the most costly damage.
- D) the \$500,000 cost figure for the additional training of ground crews includes the wages that those crews will earn during the time spent in actual training.
- E) most ground collisions have been caused by the least experienced ground-crew members

**PAGE 518, Q 571**

The air quality board recently informed Coffee Roast, a small coffee roasting firm, of a complaint regarding the smoke from its roaster. Recently enacted air quality regulations requires machine roasting more than 10 pounds of coffee to be equipped with expensive smoke-dissipating afterburners. The firm, however, roasts only 8 pounds of coffee at a time. Nevertheless, the company has decided to purchase and install an afterburner.

Which of the following, if true, most strongly supports the firm's decision?

- A) Until setting on the new air quality regulations, the board had debated whether to require afterburners for machines roasting more than 5 pounds of coffee at a time.
- B) Coffee roasted in a machine equipped with an afterburner has its flavor subtly altered.
- C) The cost to the firm of an afterburner is less than the cost of replacing its roaster with a smaller one.
- D) Fewer complaints are reported in areas that maintain strict rules regarding afterburners.
- E) The firm has reason to fear that negative publicity regarding the complaints could result in lost sales.

**PAGE 521, Q 582**

Many athletes inhale pure oxygen after exercise in an attempt to increase muscular reabsorption of oxygen. Measured continuously after exercise, however, the blood lactate levels of athletes who inhale pure oxygen are practically identical, on average, to those of athletes who breathe normal air. The lower the blood lactate level is, the higher the muscular reabsorption of oxygen is.

If the statements above are all true, they most strongly support which of the following conclusions?

- A) Athletes' muscular reabsorption of oxygen is not increased when they inhale pure oxygen instead of normal air.
- B) High blood lactate levels cannot be reduced.
- C) Blood lactate levels are a poor measure of oxygen reabsorption by muscles.
- D) The amount of oxygen reabsorbed by an athlete's muscles always remains constant.
- E) The inhaling of pure oxygen has no legitimate role in athletics.

**PAGE 523, Q 587**

Rainwater contains hydrogen of a heavy form called deuterium. The deuterium content of wood reflects the deuterium content of rainwater available to trees during their growth. Wood from trees that grew between 16,000 and 24,000 years ago in North America contains significantly more deuterium than wood from trees growing today. But water trapped in several North American caves that formed during that same early period contains significantly less deuterium than rainwater in North America today.

Which of the following, if true, most helps to reconcile the two findings?

- A) There is little deuterium in the North American caves than the deuterium in the water trapped there.
- B) Exposure to water after a tree has died does not change the deuterium content of the wood.
- C) Industrialization in North America over the past 100 years has altered the deuterium content of rain.
- D) Trees draw on shallow groundwater from rain that falls during their growth, whereas water trapped in caves may have fallen as rainwater thousands of years before the caves formed.
- E) Wood with high deuterium content is no more likely to remain preserved for long periods than is wood with a low deuterium content.

**PAGE 524, Q 592**

Many industrialized nations are trying to reduce atmospheric concentrations of carbon dioxide, a gas released by the burning of fossil fuels. One proposal is to replace conventional cement, which is made with calcium carbonate, by a new “eco-cement.” This new cement, made with magnesium carbonate, absorbs large amount of carbon dioxide when exposed to the atmosphere. Therefore, using eco-cement for new concrete building projects will significantly help reduce atmospheric concentrations of carbon dioxide.

Which of the following, if true, most strengthens the argument?

- A) The cost of magnesium carbonate, currently greater than the cost of calcium carbonate, probably will fall as more magnesium carbonate is used in cement manufacture.
- B) Eco-cement is strengthened when absorbed carbon dioxide reacts with the cement.
- C) Before the development of eco-cement, magnesium-based cement was considered too susceptible to water erosion to be of practical use.
- D) The manufacture of eco-cement uses considerably less fossil fuel per unit of cement than the manufacture of conventional cement does.
- E) Most building-industry groups are unaware of the development or availability of eco-cement.

**PAGE 526, Q 599**

Petrochemical industry officials have said that the extreme pressure exerted on plant managers during the last five years to improve profits by cutting costs has done nothing to impair the industry's ability to operate safely. However, environmentalists contend that the recent rash of serious oil spills and accidents at pharmaceutical plants is traceable to cost-cutting measures.

Which of the following, if true, would provide the strongest support for the position held by industry officials?

- A) The petrochemical industry benefits if accidents do not occur, since accidents involve risk of employee injury as well as loss of equipment and product.
- B) Petrochemical industry unions recently demanded that additional money be spent on safety and environment protection measures, but the unions readily abandoned those demands in exchange for job security.
- C) Despite major cutbacks in most other areas of operation, the petrochemical industry has devoted more of its resources to environmental and safety measures in the last five years than in the preceding five years.
- D) There is evidence that the most damaging of the recent oil spills would have been prevented had cost-cutting measures not been instituted.
- E) Both the large fines and adverse publicity generated by the most recent oil spills have prompted the petrochemical industry to increase the resources devoted to oil-spill prevention.

**PAGE 528, Q 607**

Birds have been said to be descended from certain birdlike dinosaur species with which they share distinctive structural features. The fossil record, however, shows that this cannot be so, since there are bird fossils much older than the earliest birdlike dinosaur fossils that have been found.

Which of the following is an assumption on which the argument relies?

- A) The birdlike dinosaurs have no descendants.
- B) There are no flightless dinosaur species that have the distinctive structural features shared by birds and birdlike dinosaurs.
- C) There are no birdlike dinosaur fossils that are older than the bird fossils but have not yet been unearthed.
- D) It could not have been the case that some birds were descendant from one of the birdlike dinosaur species and other birds from another.
- E) Birds cannot have been descended from dinosaur species with which the birds do not share the distinctive structural features.

**PAGE 529, Q 610**

Previously, Autoco designed all of its cars itself and then contracted with specialized parts suppliers to build parts according to its specifications. Now it plans to include its suppliers in designing the parts they are to build. Since many parts suppliers have more designers with specialized experience than Autoco has, Autoco expects this shift to reduce the overall time and cost of the design of its next new car.

Which of the following, if true, most strongly supports Autoco's expectation?

- A) When suppliers provide their own designs, Autoco often needs to modify its overall design.
- B) In order to provide designs for Autoco, several of the parts suppliers will have to add to their existing staffs of designers.
- C) Parts and services provided by outside suppliers account for more than 50 percent of Autoco's total costs.
- D) When suppliers built parts according to specifications provided by Autoco, the suppliers competed to win contracts.
- E) Most of the Autoco's suppliers have on hand a wide range of previously prepared parts designs that can readily be modified for a new car.

**PAGE 530, Q 612**

In Stenland, many workers have been complaining that they cannot survive on minimum wage, the lowest wage an employer is permitted to pay. The government is proposing to raise the minimum wage. Many employers who pay their workers the current minimum wage argue that if it is raised, unemployment will increase because they will no longer be able to afford to employ as many workers.

Which of the following, if true in Stenland, most strongly supports the claim that raising the minimum wage there will not have the effects that the employers predict?

- A) For any position with wages below a living wage, the difficulty of finding and retaining employees adds as much to employment costs as would raising wages.
- B) Raising the minimum wage does not also increase the amount employers have to contribute in employee benefits.
- C) When inflation is taken into account, the proposed new minimum wage is not high as the current one was when it was introduced.
- D) Many employees currently being paid wages at the level of the proposed new minimum wage will demand significant wage increases.
- E) Many employers who pay some workers only the minimum wage also pay other workers wages that are much higher than the minimum.

**PAGE 531, Q 616**

Infotek, a computer manufacturer in Katrovia, has just introduced a new personal computer model that sells for significantly less than any other model. Market research shows, however, that very few Katrovian households without personal computers would buy a computer, regardless of its price. Therefore, introducing the new model is unlikely to increase the number of computers in Katrovian homes.

Which of the following is an assumption on which the argument depends?

- A) Infotek achieved the lower price of the new model by using components of lower quality than those used by other manufacturers.
- B) The main reason cited by consumers in Katrovia for replacing a personal computer is the desire to have an improved model.
- C) Katrovians in households that already have computers are unlikely to purchase the new Infotek model as an additional computer for home use.
- D) The price of other personal computers in Karovia is unlikely to drop below the price of Infotek's new model in the near future.
- E) Most personal computers purchased in Katrovia are intended for home use.

**PAGE 531, Q 617**

Fast-food restaurants make up 45 percent of all restaurants in Cantaria. Customers at these restaurants tend to be young; in fact, studies have shown that the older people get, the less likely they are to eat in fast-food restaurants. Since the average age of the Canatrian population is gradually rising and will continue to do so, the number of fast-food restaurants is likely to decrease.

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

- A) Fast-food restaurants in Canatria are getting bigger, so each one can serve more customers.
- B) Some older people eat at fast-food restaurants more frequently than the average young person.
- C) Many people who rarely eat in fast-food restaurants nevertheless eat regularly in restaurants.
- D) The overall population of Canatria is growing steadily.
- E) As the population of Canatria gets older, more people are eating at home.

**PAGE 531, Q 618**

Last year a chain of fast-food restaurants, whose menu had always centered on hamburger, added its first vegetarian sandwich, much lower in fat than the chain's other offerings. Despite heavy marketing, the new sandwich accounts for a very small proportion of the chain's sales. The sandwich's sales would have to quadruple to cover the costs associated with including it on the menu. Since such an increase is unlikely, the chain would be more profitable if it dropped the sandwich.

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

- A) Although many of the chain's customers have never tried the vegetarian sandwich, in a market research survey most of those who had tried it reported that they were very satisfied with it.
- B) Many of the people who eat at the chain's restaurants also eat at the restaurants of competing chains and report no strong preference among the competitors.
- C) Among fast-food chains in general, there has been little or no growth in hamburger sales over the past several years as the range of competing offerings at other restaurants has grown.
- D) When even one member of group of diner's is a vegetarian or has a preference for low-fat food, the group tends to avoid restaurants that lack vegetarian or low-fat menu options.
- E) An attempt by the chain to introduce a lower-fat hamburger failed several years ago, since it attracted few new customers and most of the chain's regular customers greatly preferred the taste of the regular hamburger.

**PAGE 532, Q 619**

Transportation expenses accounted for a large portion of the total dollar amount spent on trips for pleasure by residents of the United States in 1997, and about half of the total dollar amount spent on the transportation was airfare. However, the large majority of United States residents who took trips for pleasure in 1997 did not travel by airplane but used other means of transportation.

If the statements above are true, which of the following must also be true about United States residents who took trips for pleasure in 1997?

- A) Most of those who traveled by airplane did so because the airfare to their destination was lower than the cost of other available means of transportation.
- B) Most of those who traveled by airplane did so because other means of transportation to their destinations were unavailable.
- C) Per mile traveled, those who traveled by airplane tended to spend more on transportation to their destination than did those who used other means of transportation.
- D) Overall, people who did not travel by airplane had lower average transportation expenses than people who did.
- E) Those who traveled by airplane spent about as much, on average, on other means of transportation as they did on airfare.

**PAGE 534, Q 627**

The difference in average annual income in favor of employees who have college degrees, compared with those who do not have such degrees, doubled between 1980 and 1990. Some analysts have hypothesized that increased competition between employers for employees with college degrees drove up income for such employees.

Which of the following, if true, most seriously undermines the explanation described above?

- A) During the 1980s a growing percentage of college graduates, unable to find jobs requiring a college degree, took unskilled jobs.
- B) The average age of all employees increased slightly during the 1980s.
- C) The unemployment rate changed very little throughout the 1980s/
- D) From 1980 to 1990 the difference in average income between employees with advanced degrees and those with bachelor's degrees also increased.
- E) During the 1980s there were some employees with no college degree who earned incomes comparable to the top incomes earned by employees with a college degree.

**PAGE 534, Q 629**

The introduction of the new drugs into the market is frequently prevented by a shortage of human subjects for the clinical trials needed to show that the drugs are safe and effective. Since the lives and health of people in future generations may depend on treatments that are currently experimental, practicing physicians are morally in the wrong when, in the absence of any treatment proven to be effective, they fail to encourage suitable patients to volunteer for clinical trials.

Which of the following, if true, casts most doubt on the conclusion of the argument?

- A) Many drugs undergoing clinical trials are intended for the treatment of conditions for which there is currently no effective treatment.
- B) Patients do not share the physician's professional concern for public health, but everyone has a moral obligation to alleviate suffering when able to do so.
- C) Usually, half the patients in a clinical trial serve as a control group and receive a nonactive drug in place of the drug being tested.
- D) An experimental drug cannot legally be made available to patients unless those patients are subjects in clinical trials of the drug.
- E) Physicians have an overriding moral and legal duty to care for the health and safety of their current patients.