

Question 1

Pharmacist: Certirizine, available either as a compounded or non-compounded medication, has been shown to be effective as an allergy medicine in a wide population of patients as a compounded medication. Because compounded forms of certirizine have unknown long-term side effects, I advise patients to go back to their doctors before I fill a compound prescription such as this to see if there are any non-compounded alternatives. I do this to minimize health risks to the patient.

Patient: That is contradictory to your usual behavior, given my long history in coming to this pharmacy. I've had several compounded prescriptions filled here before and you've never asked me to go back to my doctor. There must be another reason for your reluctance to fill this prescription.

Identify the statement that would most weaken the pharmacist's argument and the statement that would most weaken the patient's argument.

Pharmacist	Patient	
		Allergies, if left untreated, can lead to serious medical problems.
		Certirizine in both compounded and non-compounded forms has unknown long-term side effects.
		The pharmacist does not believe that the studies conducted on certirizine are well substantiated.
		The side effects of most allergy medicines take at least two years to appear.
		The pharmacist can assess known risks depending on patient profiles, but cannot do so with unknown risks.

Question 2

At Company Z's engineering division, an employee is classified either as a manager or an engineer. The division is made up of 80% engineers and 35% of those engineers are designers. None of the designers are managers.

Which of the following could be the number of managers and designers in the engineering division?

Managers	Designers	

		35
		70
		80
		10 0
		14 0
		28 0

Question 3

Sort By: ▼

Interstate Number	Length (Miles)	States Served	Westernmost State Served	Easternmost State Served
I-10	2,460	8	California	Florida
I-20	1,539	6	Texas	South Carolina
I-40	2,554	8	California	North Carolina
I-70	2,153	10	Utah	Maryland
I-80	2,900	11	California	New Jersey
I-90	3,021	13	Washington	Massachusetts
I-94	1,585	7	Montana	Michigan

The table gives information about the seven longest Primary Interstate Highways that travel east-to-west in the United States. In addition to length in miles of each Interstate, the table provides the number of states served by the Interstate and the western and eastern terminus of the Interstate.

Each column of the table can be sorted in ascending order by clicking on the word "Select" above the table and choosing, from the drop-down menu, the heading of the column on which you want the table to be sorted.

Consider each of the following statements about the Interstates. For each statement indicate whether the statement is true or false, based on the information provided in the table.

True	False	
		The ratio of the number of states served by the interstate with median length to the number of states served by the shortest interstate is equal to 4 to 3.
		The ratio of the length of the Interstate that serves the fewest states to the length of the Interstate that serves the most states is approximately 1 to 5.
		The Interstate with the median Interstate Number has a number of states served equal to the mode of the number of states served.

Question 4

Tab 1: Article

The following is an article in a medical journal by researchers at Albion University.

We have conducted a recent study with mice that indicates that Virus Alpha is contagious in a subject up to 3 weeks after infection. This result was found by placing recovering mice, which had been infected more than two weeks prior, into healthy mice communities. More than half of the healthy communities then developed a Virus Alpha outbreak. This finding belies our earlier hypothesis, which posited that Virus Alpha was reduced by the immune system to non-contagious levels in the subject within 1 week of infection. Clearly, this means that we must re-visit our response to Virus Alpha, especially with regards to citizen outreach. To ensure the most prompt public notice, our research team plans to send a service announcement to the major web-based news magazines, radio stations, and television networks with recommendations about methods of prevention, when and how to avoid contagion, and symptom recognition.

Tab 2: Blog Entry

The following is an entry in the blog Communications and Culture.

A major drawback of the Information Revolution is the ease with which an unfounded panic spreads. There is a tendency in our culture to try to prepare for every single contingency; any report of bad news, however small, triggers an avalanche of "preparedness recommendations". This situation is

exacerbated by a litigious culture in which "misfortune" becomes regularly redefined as "culpability." Because no agency wants to be liable for withholding crucial facts, information on every new health risk is disseminated almost as soon as it is discovered, many times without much verification. Too often this data becomes inflated via the rumor-mill of the Internet into a "crisis" or "epidemic," causing lowered productivity as workers stay home from fear of infection, and medicine shortages as shoppers make runs on pharmacies. Thus, attempts by the health industry to educate the citizenry via the Internet and newsfeeds result in less public security, not more.

1. For each of the following questions, indicate whether the answer to the question can be found in the texts provided.

Yes	No	
		How long would it take for someone to become infected with Virus Alpha?
		What is one component of the researchers' proposed public service announcement about the virus?
		Why do people panic when confronted with information about viral contagion?

2. For each statement, indicate whether it provides an assumption necessary to the conclusion of the blog post.

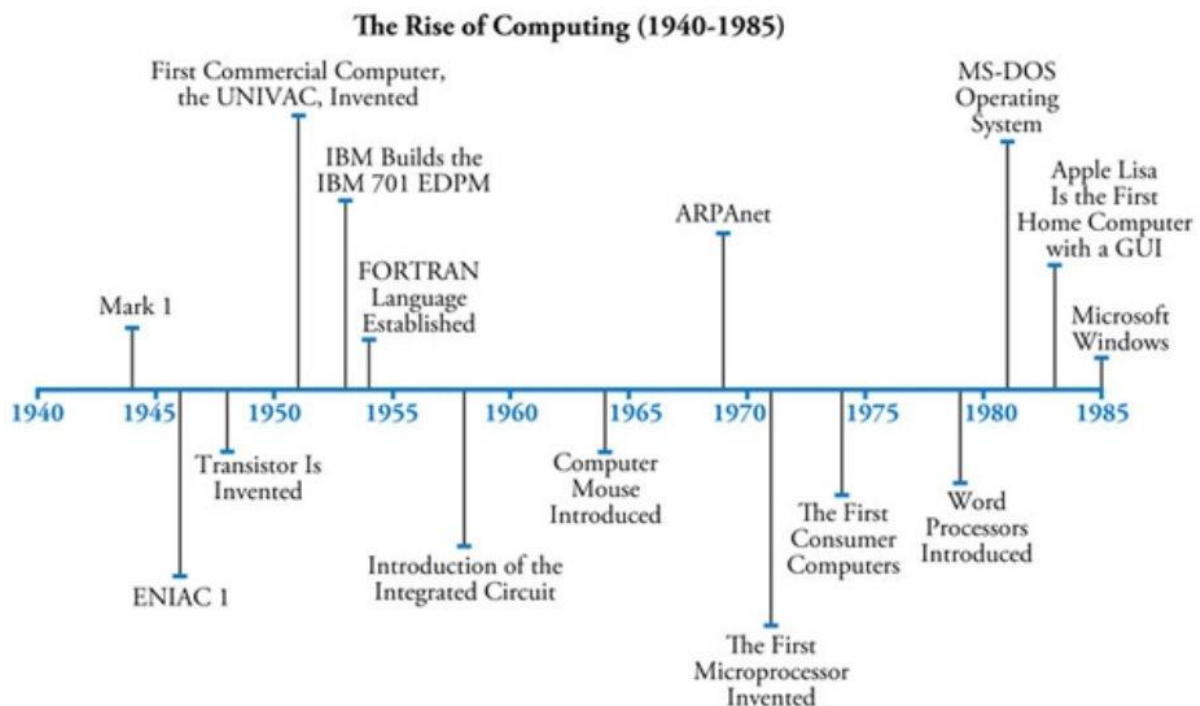
Yes	No	
		Responses to public health announcements should always be anticipated by the leaders of the health industry.
		It is more important to provide health alerts to the workers in a society than to the consumers.
		The public does not quickly receive balanced and correct information via the Internet to counteract exaggerated speculations and rumors.

3. For each statement, indicate whether the statement would weaken the researcher's conclusion about the period of contagion for Virus Alpha.

Yes	No	
		The healthy mouse communities were isolated for three weeks prior to the introduction of the infected mouse.

		The mice in the healthy communities had all been born of parent mice that had previously been infected with Virus Alpha.
		In some cases, the virus could be transmitted on the gloves of the researchers handling the mice

Question 5



The graph above is a timeline that chronicles selected events in the development of computers.

Use the drop-down menus to fill in the blanks in each of the following statements based on the information given by the graph

Approximately _____ passed between the time consumer computers were first available and the time the first home computer with a GUI was introduced. The time between the introduction of the Mark 1 and ARPAnet is approximately _____ the time between the introduction of the integrated circuit and MS-DOS.

First Blank

- A. 5 years
- B. 10 years
- C. 15 years
- D. 40 years

Second Blank

- A. one-fourth
- B. half
- C. twice
- D. equal to