

## GMAT IR Practice Practice 15

**From:** Online publishing director

**To:** All staff members

*March 5, 4:12 p.m.*

Among our company Website's various sections is our increasingly popular blog, to which our three staff writers — Michelle Alvarez, Rick Ziegler and Paul Chambers — contribute articles, or posts. It will continue to be our policy to post at least four new articles on our blog each week.

In order to attract even more visitors to our site, we've engaged John Price, a well-known freelance writer, to contribute at least one guest article (post) per week to the blog. We published his first such post on February 16th. And to enhance our site's "stickiness" (the number of pages a visitor views during the same visit), below each blog post we've added a list of links to related posts and other pages at our site.

The results of these recent enhancements are summarized in the accompanying two tables (Table 1 and Table 2).

### 10 Highest Ranking Site Pages, by Total Views

(February 15 – February 28)

Page view rank	Site section (contributor)	% of Website's total page views
1	Front page	18.4
2	Blog (Price)	5.1
3	Blog (Price)	4.6
4	Blog (Alvarez)	4.5
5	Blog (Price)	4.1
6	Blog (Alvarez)	4.0
7	Blog (Chambers)	3.9

8	Blog (Ziegler)	3.8
9	Blog (Ziegler)	3.5
10	Blog (Chambers)	3.4

### Page Views, Site Visits and Blog Posts

(Weekly Totals for February)

Week	Page views	Site visits	Number of blog articles posted			
			Alvarez	Ziegler	Chambers	Price
2/1 – 2/7	326,618	151,472	3	0	1	–
2/8 – 2/14	340,077	158,594	3	1	0	–
2/15 – 2/21	354,560	183,544	1	0	2	1
2/22 – 2/28	395,604	202,350	0	2	0	2

#### Question 1

Approximately how many page views did the site's front page receive during the last two weeks of February?

- A. 57,050
- B. 71,005
- C. 122,670
- D. 128,055
- E. 138,030

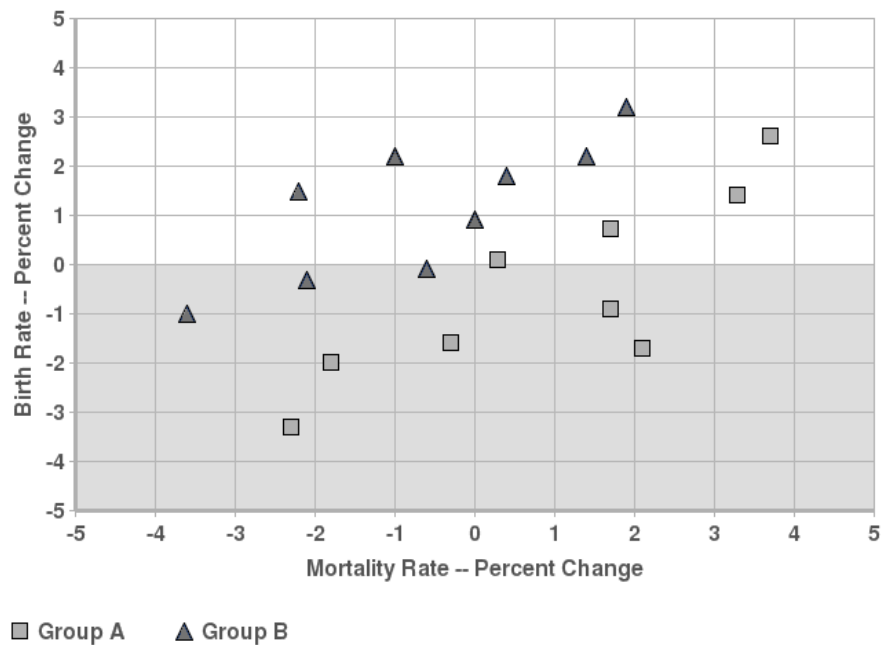
### Question 2

Consider each of the following statements. Is the statement a necessary conclusion from the information in the email and the two tables?

Yes  
No

- ☐ ☐ The site was stickier during the second half of February than during the first half of February.
- ☐ ☐ At least five of the nine blog articles viewed most often during the second half of February were posted during that time period.
- ☐ ☐ John Price was February's most popular blogger, as measured by total monthly page views.

Question 3 (below) refers to the following chart, which plots changes in average birth and mortality rates from one particular decade (1991-2000) to the next (2001-2010). Each symbol represents a different U.S. city.



NOTE: Negative numbers denote percent decrease.

### Question 3

Assume that birth and mortality rates were the only factors in each city's population change from one decade to the next. Use the drop-down menus to complete the following two statements according to the information presented in the chart.

- The data suggest that from one decade to the next a total of  Select... three five six nine cities in Group A experienced population declines.
- Among the cities in Group B whose birth rates increased from one decade to the next, the median change in mortality rate was approximately  Select... 0.2 0.8 1.5 2.6 percent.

#### Question 4

Company A currently employs exactly four times as many workers as Company B. Over the most recent 12-month period, Company B has doubled its workforce while Company A has increased its workforce by only fifty percent. Analysts expect that for each company annual workforce growth will continue at the most recent 12-month rate into the foreseeable future.

The following table provides various possibilities as to the number of workers each of the two companies might employ 24 months from now. In the table, identify the projected total number of Company A employees and the projected total number of Company B employees that together are consistent with analysts' expectations. Make only two selections, one in each column.

Company A	Company B	Number of workers
<input type="radio"/>	<input type="radio"/>	800
<input type="radio"/>	<input type="radio"/>	1200
<input type="radio"/>	<input type="radio"/>	1600
<input type="radio"/>	<input type="radio"/>	2700
<input type="radio"/>	<input type="radio"/>	3200
<input type="radio"/>	<input type="radio"/>	3500

#### Question 5

Work crews Alpha and Zeta are repaving a section of freeway in Los Angeles. Work crew Alpha started its work one week (40 working hours) earlier than work crew Zeta, and started on the north end of the freeway, working its way south at a rate of 12 meters per hour since starting the job. Now, work crew Zeta has started at the south end, working its way north at a rate of 10 meters per hour. The section of freeway that needs to be repaved is 1.5 kilometers long, including the section that has already been paved.

Given that each crew will not necessarily work the same number of hours, which of the following answer choices represents an hourly workload for each crew that will finish the project? Please make only one selection in each column.

Crew Alpha	Crew Zeta	Number of Hours
<input type="radio"/>	<input type="radio"/>	10
<input type="radio"/>	<input type="radio"/>	20
<input type="radio"/>	<input type="radio"/>	30
<input type="radio"/>	<input type="radio"/>	40
<input type="radio"/>	<input type="radio"/>	50
<input type="radio"/>	<input type="radio"/>	60

### Question 6

Two companies are competing with one another for a contract to provide work uniforms to a customer, which is a large global manufacturing business. Company A sells its uniforms for \$25 per uniform, and Company B's price is \$30 per uniform. Both companies sell their uniforms in lots of 5,000 each. The customer has considered ordering some uniforms from both companies, in order to test them out before committing to one company on an ongoing basis. The company wants to spend exactly \$1,000,000 on the test purchase.

In the table below, identify the number of uniforms that the customer should buy from Company A and from Company B so that the customer spends exactly \$1,000,000. Make only one selection in each column.

Company A	Company B	Number of Uniforms
<input type="radio"/>	<input type="radio"/>	5,000
<input type="radio"/>	<input type="radio"/>	10,000
<input type="radio"/>	<input type="radio"/>	15,000
<input type="radio"/>	<input type="radio"/>	25,000
<input type="radio"/>	<input type="radio"/>	30,000
<input type="radio"/>	<input type="radio"/>	40,000

### Question 7

**Joseph:** Health insurance premiums are growing at an alarming rate. This is, in part, because many hospitals and clinics bill for unnecessary diagnostics and tests that inflate the subsequent amount that insurers pay out to them. These expenses are then passed on to consumers in the form of increased insurance premiums. Therefore, reducing the number of unnecessary tests performed by health care providers will be effective in controlling growing health insurance premiums.

**Ronald:** Often times, the unnecessary diagnostics that you speak of are the result of decisions made by doctors on behalf of their patients. Doctors will often choose the diagnostics that will allow them to bill insurers for more money, but may not be necessarily benefit the patient in a meaningful way or influence the course of treatment chosen. As a result, in order to succeed in reducing the number of unnecessary tests, we should allow the patient to decide which course of diagnostics they would like to undergo.

In the table below, identify the assumptions upon which each person's argument depends. Make only one selection in each column, one for Joseph and one for Ronald.

Joseph	Ronald	Assumptions
<input type="radio"/>	<input type="radio"/>	Doctors are generally able to determine, with great reliability, which diagnostic procedures and tests would yield the most effective results.
<input type="radio"/>	<input type="radio"/>	Tests and diagnostic procedures do not make up an insignificant portion of the bills that are sent to insurers.
<input type="radio"/>	<input type="radio"/>	Insurance companies in other industries such as auto and home, have been able to reduce costs by reducing the number of unnecessary repairs and replacements on claims for automobiles and homes.
<input type="radio"/>	<input type="radio"/>	Patients are not just as likely as doctors to choose the most expensive diagnostics and tests.
<input type="radio"/>	<input type="radio"/>	Health insurance premiums have increased twice as fast in the past 5 years than they have over an average of the past 25 years.

## Question 8

**Client:** Our newest line of mini-computer, the JS-780, is not gaining traction with our customers. Although it is a better product than our main competitor's SS-600 and has a faster processor, and a more sophisticated graphics card, the product has not sold as many units as the SS-600. Our JS-780 is priced higher than the SS-600. We would like to figure out how to convince potential customers to pay more for our product as opposed to purchasing our competitor's product.

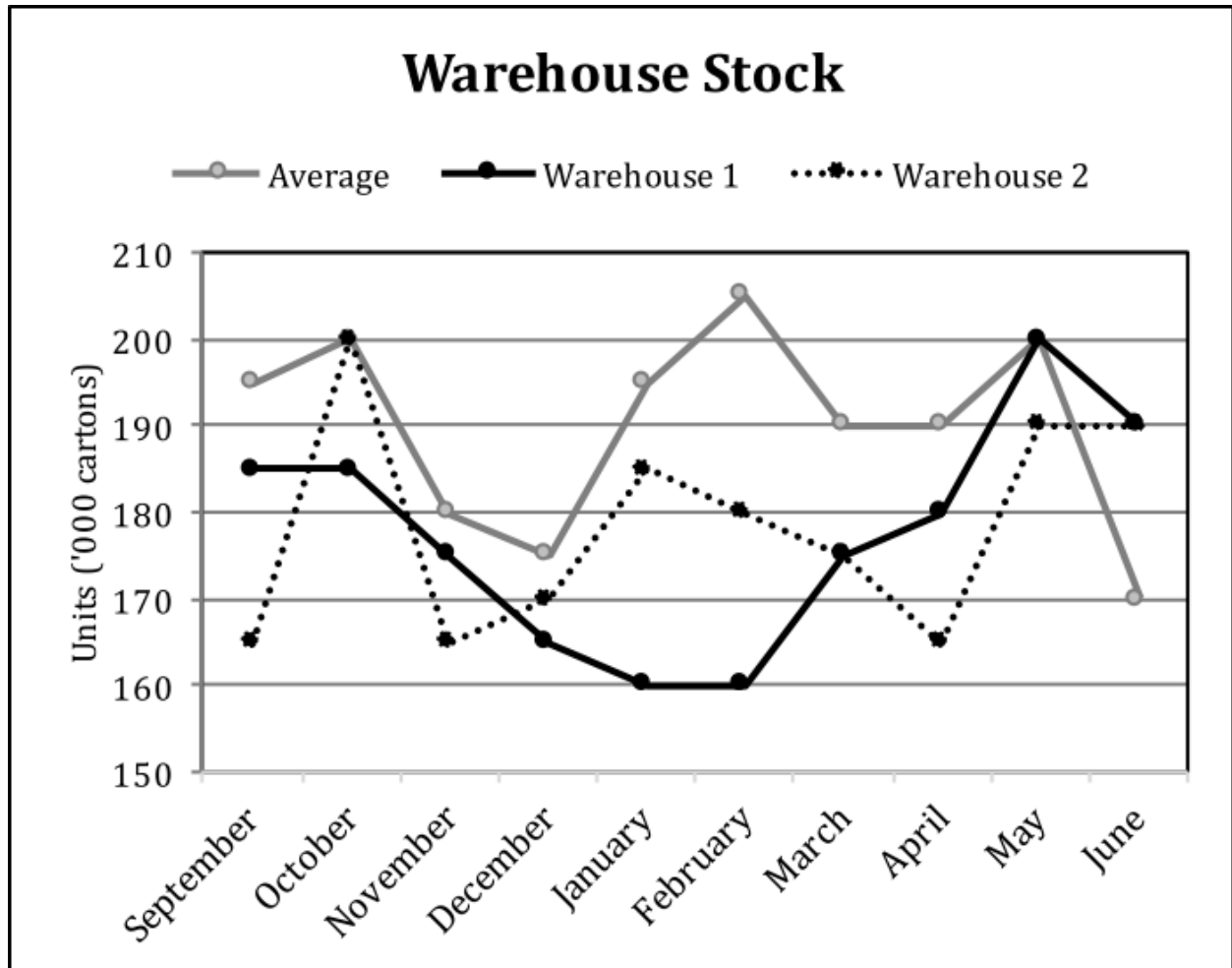
**Marketing Consultant:** Our research shows that many people do not understand the benefits of having a mini-computer with a faster processor and more sophisticated graphic card. I recommend that you run a television commercial featuring a well-known celebrity who will educate the public about the benefits of having such features in a mini-computer. People are generally trusting of well-known celebrities and find commercials featuring those celebrities persuasive. Therefore I recommend that you undertake such a television commercials.

In for the Marketing Consultant's suggestion to have the client's desired effect, it depends upon a cause and effect relationship. Choose the cause and subsequent effect in the columns below upon which the Marketing Consultant's suggestion depends. Choose only one for each column.

Cause	Effect	Statements
<input type="radio"/>	<input type="radio"/>	The public will become more trusting of well-known celebrities.
<input type="radio"/>	<input type="radio"/>	The public will find the commercial campaign to be persuasive.
<input type="radio"/>	<input type="radio"/>	The JS-780 will be featured in the commercial.
<input type="radio"/>	<input type="radio"/>	The public will place a greater value on a mini-computer with a faster processor and more sophisticated graphics card.
<input type="radio"/>	<input type="radio"/>	The makers of the SS-600 will respond with their own commercial featuring a well-known celebrity.
<input type="radio"/>	<input type="radio"/>	The public will purchase mini-computers in greater quantities than they have in the past.

## Question 9

The PE Corporation has four warehouses that stock electric bulbs. The line-graph presents the number of cartons stocked by the first two warehouses, and an average stock of all the four warehouses for the months September to June.



Based on the given information, use the drop-down menus to most accurately complete the following statements:

Question 9

The highest number of electric bulb cartons stocked by the other two warehouses (warehouse 3 and 4) was in \_\_\_\_\_.

- (A) October
- (B) December
- (C) February
- (D) February and in May
- (E) May

### Question 10

The lowest number of electric bulb cartons stocked by the other two warehouses (warehouse 3 and 4) was in \_\_\_\_\_.

- (A) November
- (B) December
- (C) December and in May
- (D) May
- (E) June

### Question 11

Working individually, Alex, Betty, and Cherry can do a job in 8, 24, and 48 hours, respectively. It was decided that each of them will work on the job successively for an hour. Anyone can start the work and others will follow. Select in the table "Minimum hours" and "Maximum hours" required to complete the job.

Make only two selections, one in each column.

	Minimum hours	Maximum hours	
A	<input type="radio"/>	<input type="radio"/>	15
B	<input type="radio"/>	<input type="radio"/>	15.5
C	<input type="radio"/>	<input type="radio"/>	16.17
D	<input type="radio"/>	<input type="radio"/>	17
E	<input type="radio"/>	<input type="radio"/>	17.33

### Question 12



The table presents quarterly sales and inventory data, in metric tons (MT), for Apex Corporation for a few steel products.

S - Sales (MT); I - Inventory (MT)

Products	Quarter I		Quarter II		Quarter III		Quarter IV		Yearly Total	
	S	I	S	I	S	I	S	I	S	I
CR pipe	24	12	15	8	4	8	13	4	56	32
CR sheet	16	8	12	12	16	4	15	21	59	45
CR tube	15	15	16	8	6	15	8	4	45	42
CR wire	15	0	24	8	18	13	13	12	70	33
HR pipe	24	12	21	8	5	21	12	15	62	56
HR sheet	18	15	15	16	0	0	14	3	47	34
HR tube	8	9	8	21	8	0	9	2	33	32
HR wire	24	26	12	16	15	15	8	4	59	61
HS Billet	21	24	21	0	18	5	15	12	75	41
MS Billet	10	8	15	0	18	2	15	16	58	26
Total	175	129	159	97	108	83	122	93	564	402

For each of the following statements, select "Yes" if the statement is true based on the information provided; otherwise select "No."

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Yes   No

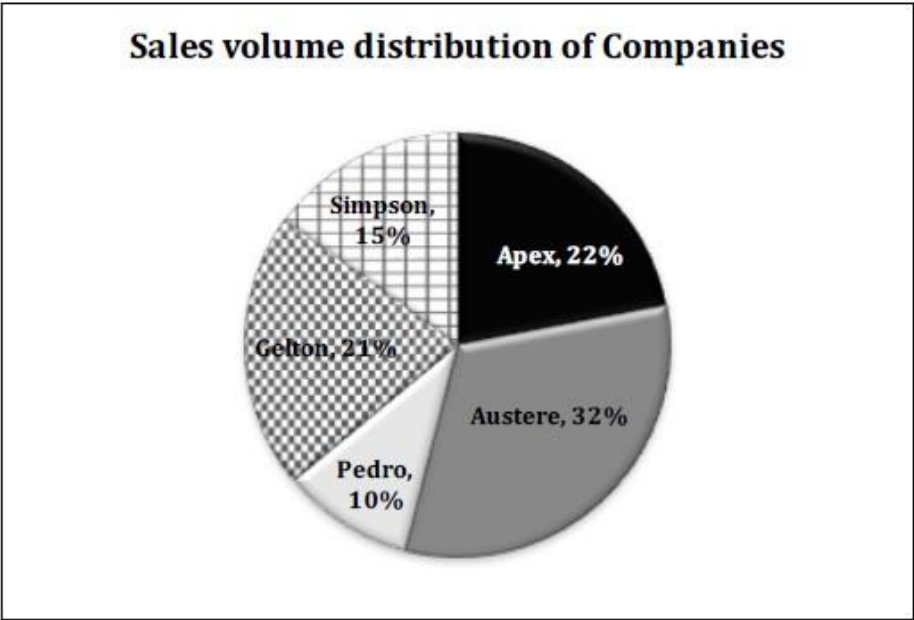
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- A   ☐   ☐   In quarter II, among all products, CR tube sale is least deviated from the arithmetic mean sale for that quarter.
- B   ☐   ☐   In quarter IV, among all the products, highest sales-to-inventory ratio was observed for HR tubes.
- C   ☐   ☐   Median sale for quarter I is more than that for each of the other three quarters.
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**Tab 1**

Sales Volume distribution of companies	Sales Volume of Apex Corp	Price
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In the mosquito-repellent product category, there are five major companies in the retail business. The pie chart represents company-wide sales volume distribution of mosquito-repellent products.



**Tab 2**

<b>Sales Volume distribution of companies</b>	<b>Sales Volume of Apex Corp</b>	<b>Price</b>
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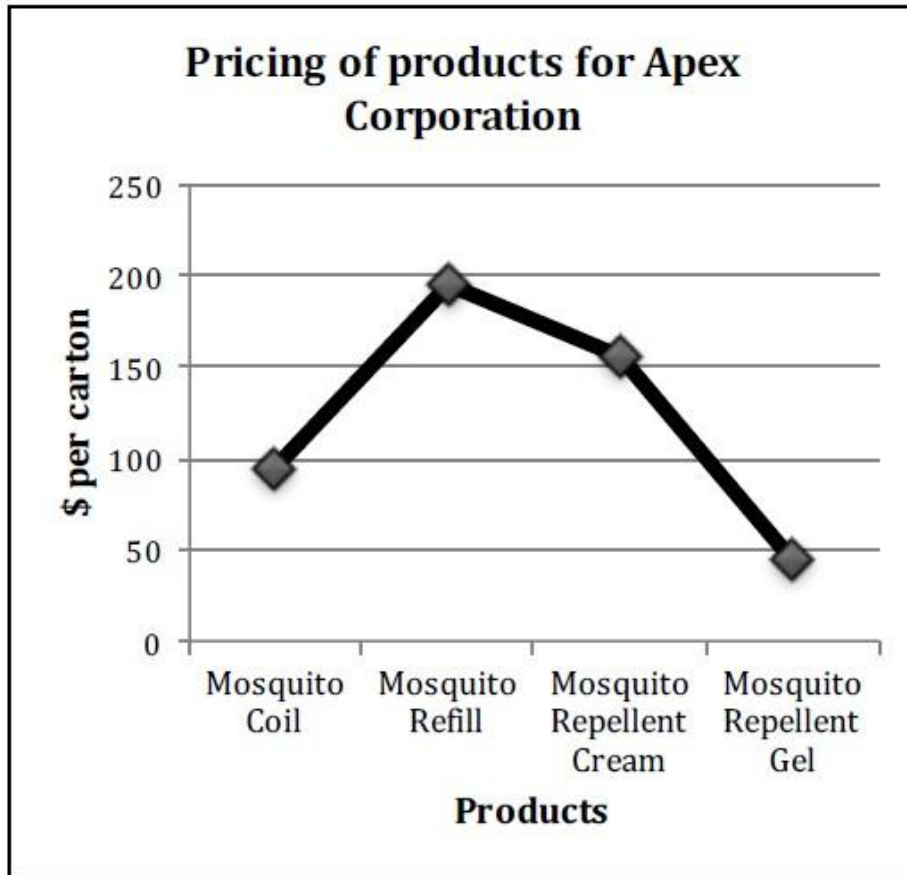
The table below presents the region-wise and product-wise sales volume distribution of the Apex Corporation.

Products	North	South	East	West	Total
Mosquito Repellent Coil	124	140	106	50	420
Mosquito Repellent Refill	100	110	90	70	370
Mosquito Repellent Cream	46	140	98	6	290
Mosquito Repellent Gel	24	98	32	16	170
<b>Total</b>	<b>294</b>	<b>488</b>	<b>326</b>	<b>142</b>	<b>1,250</b>

*Unit: '000 cartons*

**Tab 3**

Sales Volume distribution of companies	Sales Volume of Apex Corp	Price
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### Question 13

For each of the following statements, select "Yes" if the statement is true based on the information provided; otherwise select "No."

	Yes	No	
A	<input type="radio"/>	<input type="radio"/>	The difference between the sales volume of Austere Corporation and Pedro Corporation is more than 1,250,000 cartons.
B	<input type="radio"/>	<input type="radio"/>	For the Apex Corporation, sales revenue from the Eastern region is more than that from the Northern region.
C	<input type="radio"/>	<input type="radio"/>	For the Apex Corporation, sales revenue from Mosquito Coil is more than that from Mosquito Refill.

### Question 14

If the Pedro Corporation sells exactly the same kinds of mosquito repellent products as does Apex Corporation: Coils, Refills, Cream, and Gel, and it has the same proportion of sales volume for the four products as does Apex Corporation, then how many Gel cartons did the Pedro Corporation sell?

- (A) 38,000
- (B) 77,000
- (C) 170,000
- (D) 374,000
- (E) 1,250,000

### **Question 15**

Keeping the total sales volume the same for the Apex Corporation, which of the following rearrangement of sales volume of products will generate more sales revenue than currently?

- (A) Reduce the Mosquito Coil sales volume by half and increase the sales volume of Mosquito Repellent Gel by the same amount.
- (B) Reduce the Mosquito Refill sales volume by one-third and increase the sales volume of Mosquito Repellent Cream by the same amount.
- (C) Reduce the Mosquito Cream sales volume by 20% and increase the sales volume of Mosquito Repellent Gel by the same amount.
- (D) Reduce the Mosquito Coil sales volume by 33.33% and increase the sales volume of Mosquito Repellent Cream by the same amount.
- (E) Reduce the Mosquito Repellent Cream sales volume by 66.66% and increase the sales volume of Mosquito Coil by the same amount.

