GMAT INTEGRATED REASONING PRACTICE PAPER

GRAPHICAL REPRESENTATION

QUESTION 1

Light Output over 120-Day Period
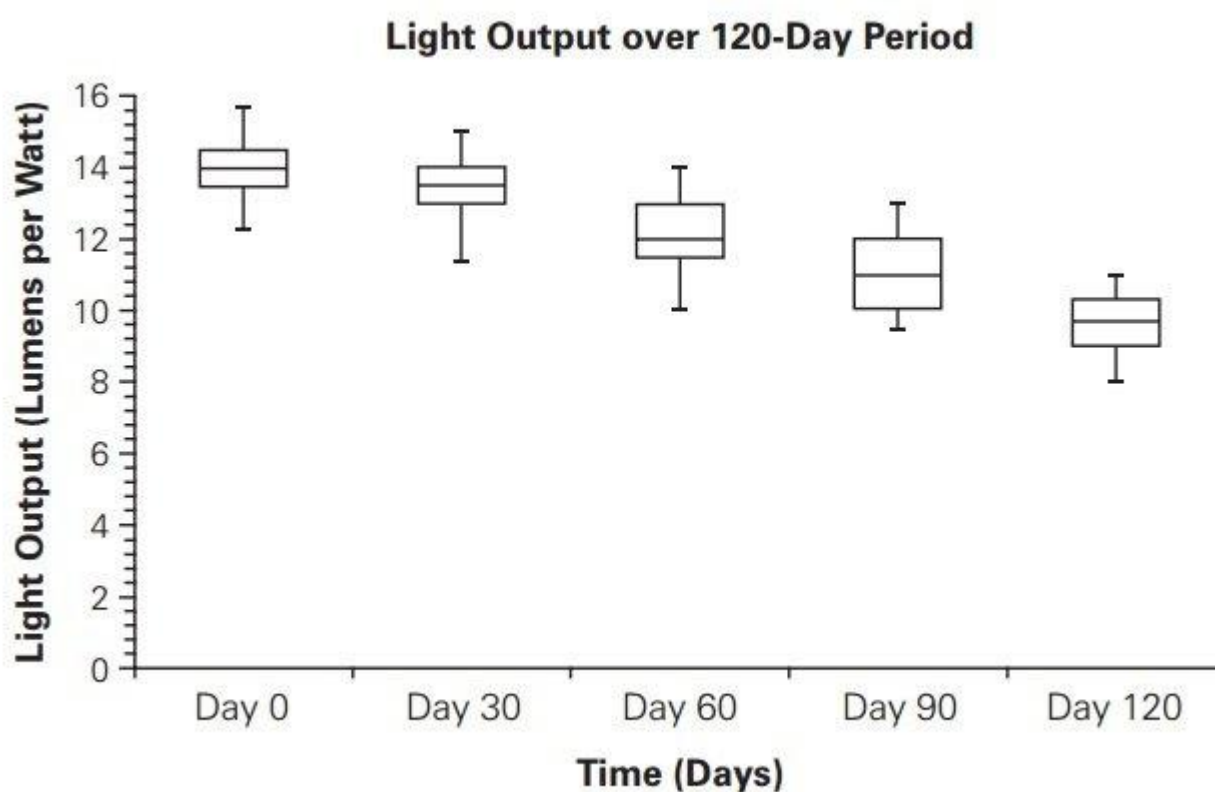
The graph above is a box plot with five measurements, each representing the average light output (in lumens per watt) of 25 60-Watt incandescent light bulbs, measured over a 120-day period. Each box represents the middle 50%, also known as the interquartile range, and the lines extending vertically upwards or downwards represent the top 25% and bottom 25%, respectively. The solid line inside the box represents the median light output for each measurement.

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

1. Light output ranges from _____ lumens per watt between Day 30 and Day 120.

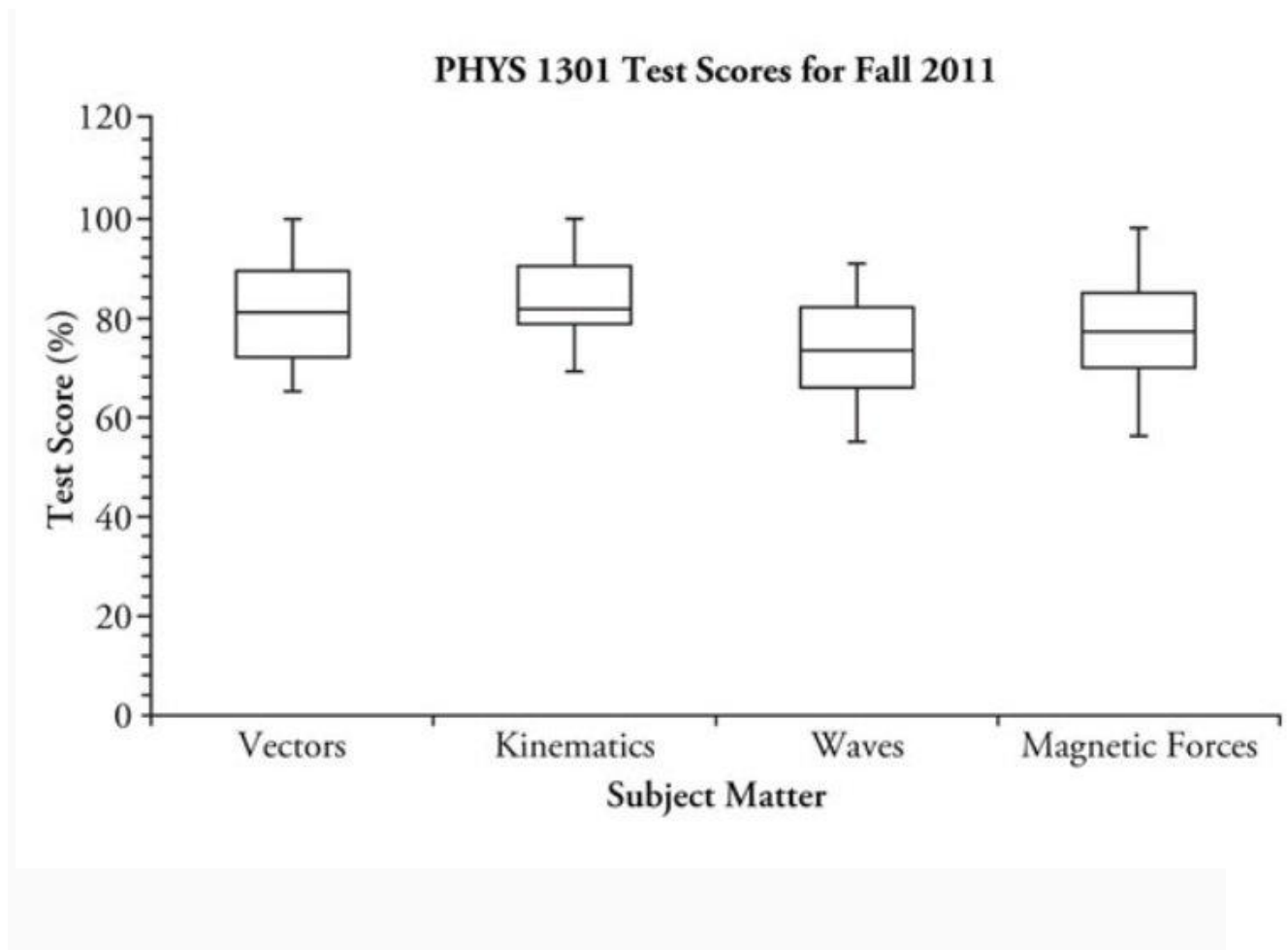|		
(A)	15	to	8
(B)	14	to	9.5
(C)	13.5	to	9.75

2. The greatest interquartile range occurs on _____.

(A)	Day	0
(B)	Day	30
(C)	Day	60
(D)	Day	90
(E)	Day	120

3. Light output and time have _____ relationship.

(A)	a	direct
(B)	an	indirect
(C) no		

QUESTION 2

PHYS 1301 Test Scores for Fall 2011

The graph above is a box plot with four measurements, each representing the scores of 20 students, measured over the Fall 2011 semester of PHYS 1301. Each box represents the middle 50%, also known as the interquartile range, and the lines extending vertically upwards or downwards represent the top 25% and bottom 25%, respectively. The solid line inside the box represents the median test score for each measurement.

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

Test scores range from_____between the Vector Test and the Waves Test.

A.	100	to	55
B.	100	to	65
C.	90	to	55
D.	90	to	65

The median score for the Magnetic Forces test is approximately_____the median score for the Kinematics test.

A.			Equal			to
B.	One	percentage	point	less		than
C.	One	percentage	point	greater		than
D.	Five	percentage	points	less		than

E. Five percentage points greater than

QUESTION 3
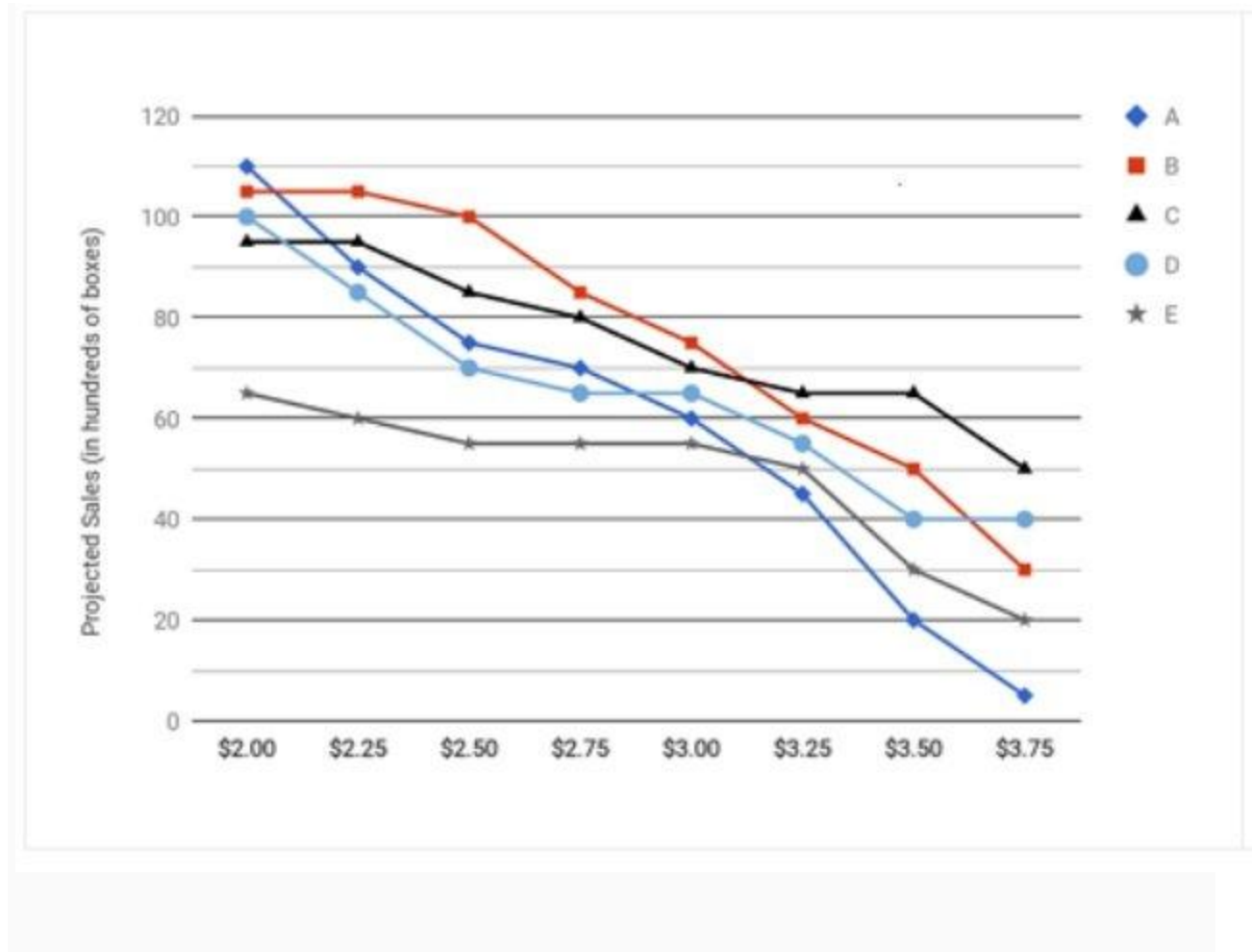
The chart shows the projected monthly sales for five brands of tea, measured in hundreds of boxes, at certain price points.

For each statement, select the option from the drop-down menu that completes the statement as accurately as possible according to the information provided.

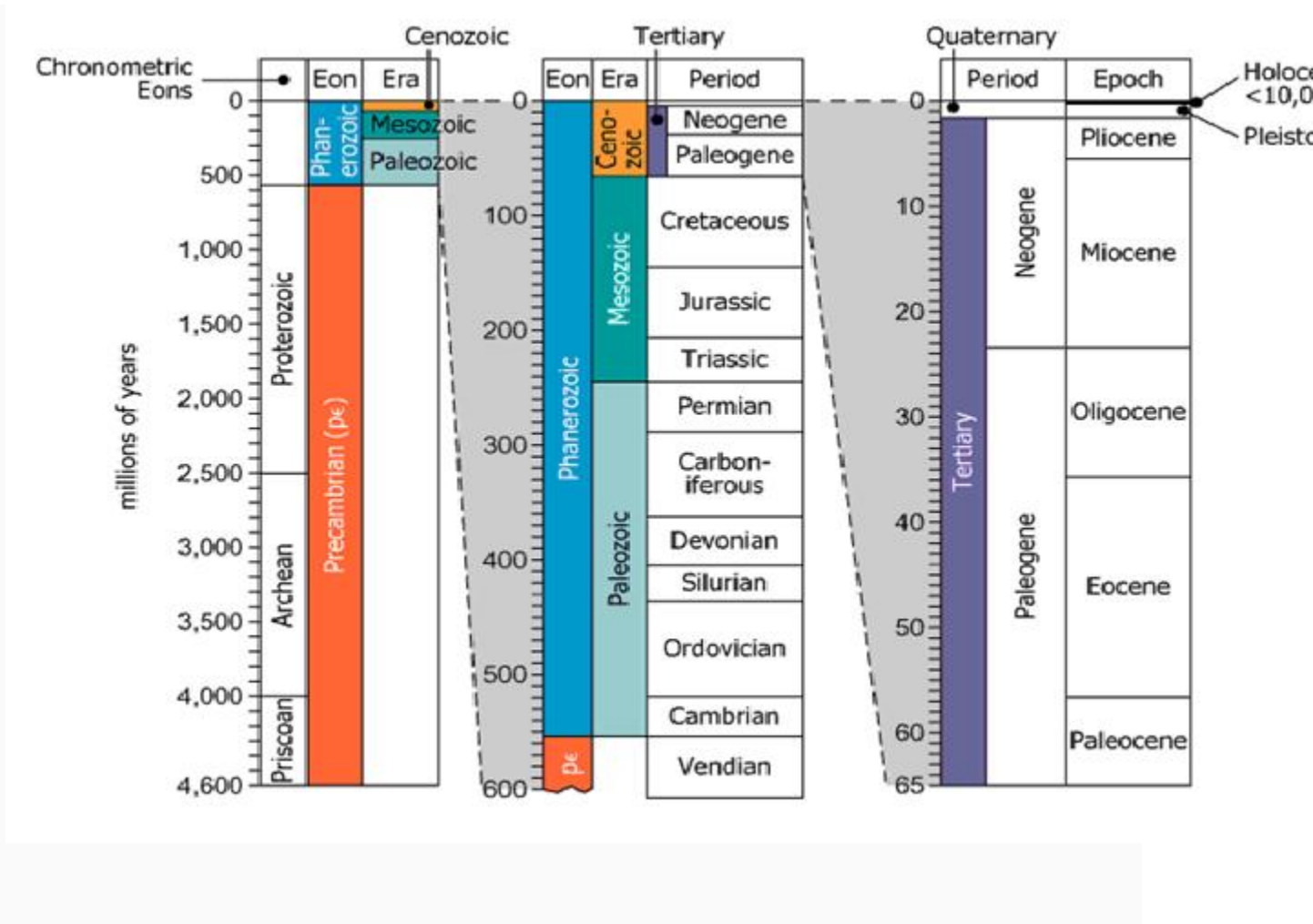**In general, the selling price of Brand C tea has_____the selling price of Brand B tea.**

A. a greater effect on projected sales than

| B. | as | much | effect | on | projected | sales | as |
| C. | a | lesser | effect | on | projected | sales | than |

A.	Brand	A	for	$2.00	per	box
B.	Brand	B	for	$2.50	per	box
C.	Brand	B	for	$3.00	per	box
D.	Brand	C	for	$3.50	per	box

E. Brand C for $3.75 per box

QUESTION 4

The diagram shows, in three column groupings, various divisions of Earth's geological history since its formation approximately 4,600 million years ago. In the leftmost column grouping, the Precambrian eon is subdivided into chronometric eons shown on the far left; but otherwise, in the rest of the graphic, each subsequent column to the right shows the subdivisions of the timeframes to its left. Each of the rightmost two column groupings is a magnification—with additional information—of a portion of the grouping directly to its

left.

Fill each blank using the drop-down menu to create the most accurate statement on the basis of the information provided.
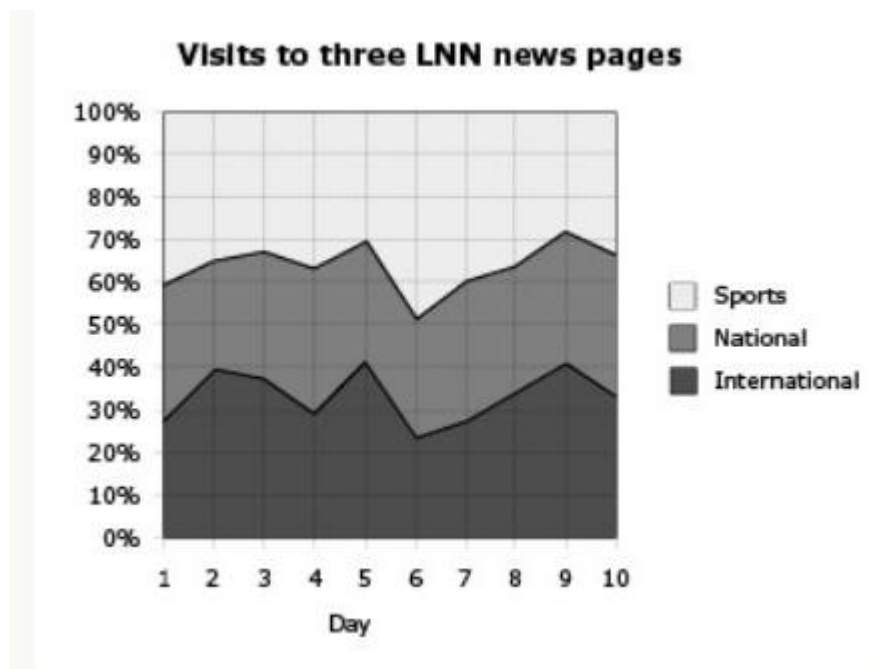
1. The Miocene epoch spans closest to _____ of the era of which it is a part.

A. 3%
B. 25%
C. 85%

2. According to the diagram the beginning of the _____ marks the onset of a new eon, era, and period in geological history.

A.	Cambrian	period
B.	Triassic	period
C.	Pliocene	epoch

D. Precambrian eon

QUESTION 5

Visits to three LNN news pages

The stacked line graph to the left shows the percentage of visits to the LNN news network for each of its three main news web pages. The x-axis indicates each of the 10 days over which the data were recorded, and the y-axis indicates the percentage of visits. The study did not distinguish between repeated visits by the same user over the same day or days; it only counted the number of times the three websites were loaded.

Use the drop-down menus to complete the statements according to the information in the graph.

The news page whose percentage of hits was the most consistent over the 10 days measured was_____.

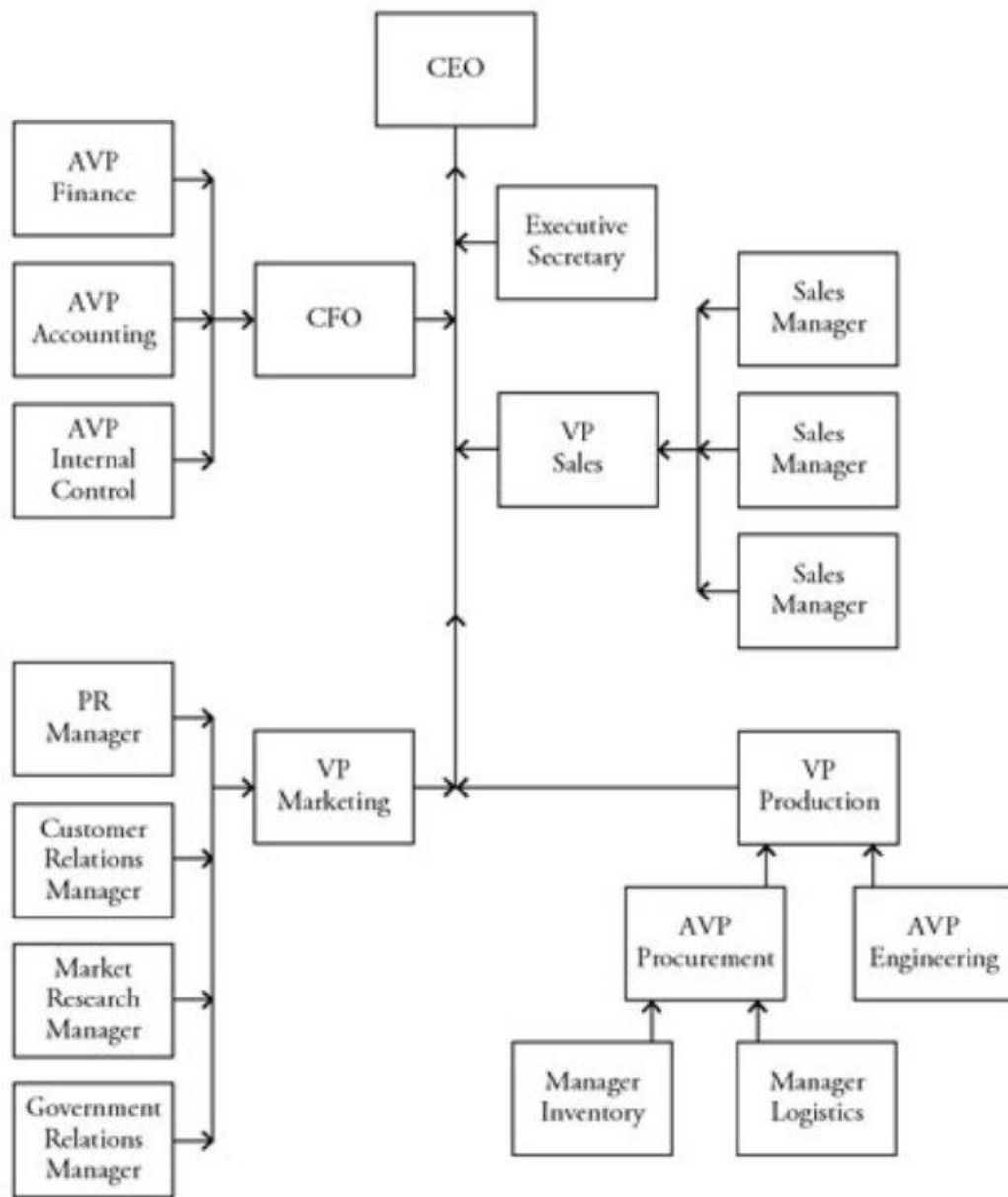A. the international page
B. the national page
C. the sports page

If the total number of visits to LNN doubled from Day 6 to Day 9, then the number of visits to the sports page_____ over the same period.

A. increased
B. remained constant
C. decreased

MULTI-SOURCE REASONING

QUESTION 1

Tab 1: Flow Chart

Tab 2: Memo

Attached is the Spring 2010 organizational chart for ProFab Partners. A CFO and two new VP-level positions have been added due to growth over the past few quarters: AVP Accounting, and AVP Procurement. The CFO will report directly to the CEO; the AVP of Accounting will report directly to the CFO, and the AVP of Procurement will report to the VP of production. Every employee in the organization chart who reports directly to the CEO is at salary level A. Each subsequent level of reporting is at salary level B, and all employees under B-level employees are at salary level C.

1. Based on the flow chart and the text in the Memo tab, indicate whether each of the following statements is true or false.

True	False	
		Sales managers are B-level employees.
		The new AVP of Procurement is a C-level employee.
		The AVP of Engineering is under the new AVP of Procurement.

QUESTION 2

Discussion | Table | Floor Plan

Metro Research is moving into a new office space, configured as shown in the Floor Plan, with eight individual offices (111, 112, 114, 115, 116, 117, 120, and 121) and fc cubicles (119A through 119D). Each employee will be assign exactly one workspace—an office or a cubicle—with no more than one employee per office or cubicle. Supervisors will not be assigned workspace in cubicles. If an employee has an immediate supervisor, the employee's office or cubicle must adjacent to that supervisor's office.

Table (Tab 2)
The table lists the ten employees at Metro Research and shows each employee's immediate supervisor, if any.
The supervisors are also employees, so each supervisor's name appears in both columns.

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Employee	Supervisor
Salena	Ciaran
Richard	Kim
Kim	
Pablo	Leila
Leila	
Atticus	Jamal
Elena	Ciaran
Jamal	
Mei	Jamal
Ciaran	Leila

Floor Plan (Tab 3)

The floor plan shows the office space that Metro Research will occupy, in the northeast corner of one floor of a building. Two offices are adjacent to each other if and only if they are separated by a common wall. A different definition of adjacent applies to cubicles: cubicles 119A and 119B are adjacent only to office 121, while 119C and 119D are adjacent only to office 120.

Attachment:

The floor plan shows the office space that Metro Research will occupy, in the northeast corner of one floor of a building. Two offices are adjacent to each other if and only if they are separated by a common wall. A different definition of *adjacent* applies to cubicles: cubicles 119A and 119B are adjacent only to office 121, while 119C and 119D are adjacent only to office 120.
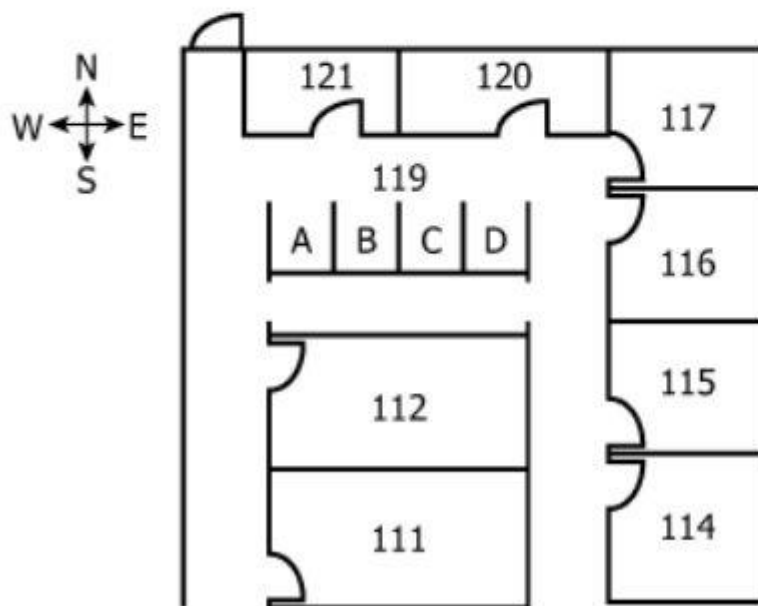
Question. 1
Based on the information and workspace assignment rules provided, how many employees are there, each of whom could be assigned to office 112?

A. 1

B. 2

C. 3

D. 4

Question. 2

For each of the following situations, select Yes if, based on the information and workspace assignment rules provided, it would PREVENT some employees from being assigned workspace using the current rules. Otherwise, select No.

For each of the following situations, select *Yes* if, based on the information and workspace assignment rules provided, it would PREVENT some employees from being assigned workspace using the current rules. Otherwise, select *No*.

Yes	No	
○	○	Mei, Pablo, and Selena need offices because the projects they work on require the highest levels of security.
○	○	Two additional employees are hired and will be supervised by Jamal.
○	○	Richard resigns his position at Metro Research.

QUESTION 3

Tab 1: Saxophones

The saxophone, developed in 1846 by Adolphe Sax, is an instrument with a single-reed mouthpiece and a conical brass body that is often curved. Closely related to the clarinet, the saxophone is designed to project like a brass instrument while offering musicians the agility of sound of a woodwind.

Saxophones come in a wide variety of shapes and sizes, with larger instruments spanning lower musical ranges. The most common saxophones by far are alto and tenor saxophones, followed by baritone and soprano saxophones.

Saxophones were developed for use in military marching bands. Sections of saxophonists have gained acceptance in concert and big band settings as well. But perhaps the best known setting for saxophones is in jazz, where saxophone soloists are often the star performers.

Tab 2: Range

The range of a musical instrument is the distance from the lowest to the highest pitch that the instrument can play. Scientific discussion of music usually refers to hertz (Hz), the number of vibrations per second of a given tone: the higher the frequency, the higher the pitch registers to the human ear. Musicians, however, refer to octaves. Increasing a tone by one octave is equivalent to doubling the frequency; decreasing it by one octave is equivalent to halving the frequency.

The exact range of reed instruments is difficult to determine. While the lowest note that a woodwind can produce is generally fixed, woodwinds can be "overblown": their upper range can be raised by increasing the air pressure applied to the mouthpiece. Theoretically, this means that even a contrabass saxophone can produce notes as high as those produced on a sopranino saxophone. However, the physical capabilities of human mouths and lungs impose a practical upper limit. The following table, which lists the ranges of several types of saxophone, assumes a very skilled practitioner. Many inexperienced players will not reach the upper ranges shown. If a player were capable of exceeding these ranges, he or she would be unlikely to do so in the context of a musical performance.

Tab 3: Table

Pitch Ranges of Saxophone Types, in Hertz

1. Consider the following statements. For each of the following statements, can the statement be properly inferred from the information on the tabbed pages?

Yes	No	
		Woodwind instruments offer musicians greater agility of sound than do brass instruments.
		Producing a 600 Hz tone from a baritone saxophone requires great skill.
		Saxophone notes ranging from 60 Hz to 1000 Hz might be heard in a concert band.

2. Consider the following statements. For each of the following statements, can the statement be properly inferred from the information on the tabbed pages?

Yes	No	
		Saxophones that can produce 1500 Hz tones during performances are uncommon.
		Saxophones with lower-frequency ranges tend to have smaller ranges, measured in Hz.
		The saxophone with the largest range in Hz does not have the greatest percentage difference between the frequency of its high and low pitches.

A.	1
B.	2
C.	3
D.	4

E. 5

QUESTION 4

Village Sites (Tab 1)

An archaeological team has been excavating three ancient village sites—Barras, Agna, and Cussaia—looking in particular at kitchen waste dumps as a way to understand the villages' dietary patterns and trading relationships. What follows are brief summaries of their findings.

Barras: The best data come from stratified finds in this oceanside village, which was inhabited from AD 600 to 1300 and was the only one of the three villages to produce seafood, its main dietary item. Though Barras residents hunted on land and raised crops, this provided relatively small amounts of food. As Barras's overall prosperity rose, there was more food available per person, and its population increased from an average of 100 residents in the AD 600s to 400 residents in the AD 1000s to 600 residents in the AD 1200s.

Agna: Agna was established in an inland forest around AD 800 and its residents mainly hunted but also ate considerable amounts of fruit, nuts, and other forest-vegetable products. They also traded meat to Barras for other goods. With no open fields, Agna grew no grain.

Cussaia: Predating Barras, Cussaia depended heavily on raising grain crops and eventually obtained seafood and meat via trade. It traded directly only with Barras, because a mountain range separated it from Agna, though some products may have been traded between Agna and Cussaia via Barras.

Additionally, there is no evidence that any other village traded with Barras, Agna, or Cussaia prior to AD 1300.

Attachment:

Practice Exam 2

Village Sites | **Food Variety** | **Food Consumption**

An archaeological team has been excavating three ancient village sites—Barras, Agna, and Cussaia—looking in particular at kitchen waste dumps as a way to understand the villages' dietary patterns and trading relationships. What follows are brief summaries of their findings.

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Food Variety (Tab 2)
Attachment:

Barras: Percentages, by Estimated Weight, of Dietary Items Consumed per Person per Month

Century	Seafood	Meat	Grains	Other
600s	65%	10%	10%	15%
700s	65%	10%	15%	10%
800s	60%	15%	15%	10%
900s	45%	30%	12%	13%
1000s	45%	30%	12%	13%
1100s	60%	10%	20%	10%
1200s	55%	25%	10%	10%

Food Consumption (Tab 3)
Attachment:

Barras, Agna: Estimated Average Monthly
Meat and Seafood Consumption
(lb per 4-Person Family)

Century	Barras		Agna	
	Seafood	Meat	Seafood	Meat
600s	240	37	Not applicable	Not applicable
700s	250	38	Not applicable	Not applicable
800s	275	70	60	240
900s	258	172	66	180
1000s	240	160	66	186
1100s	275	45	8	240
1200s	265	120	45	240

Question #1

Attachment:

Assume that any increase of 5% or more from one century to the next in the amount of a given food consumed by Barras residents is due primarily to a corresponding increase in imports of that food into Barras from other villages. Given this assumption and the information provided, for each of the following, select *Yes* if it describes a food likely imported by Barras during times of increased food consumption. Otherwise select *No*.

Yes No

○ ○ Meat from Agna from the AD 500s to the AD 600s

○ ○ Meat from Agna from the AD 800s to the AD 900s

○ ○ Grain from Cussaia from the AD 600s to the AD 700s

Question #2

For each of the following, select *Yes* if the statement is separately supported by the passage and separately supported by each of the two tables. Otherwise select *No*.

Yes No

○ ○ Barras's population increased from the AD 600s to 1200s.

○ ○ Agna grew no grain.

○ ○ Cussaia traded directly only with Barras.

Based on the information in the passage and tables, it can be determined that the average monthly meat consumption, in pounds, by the residents of Barras in the AD 1000s was which one of the following?

○ 9,600

○ 10,000

○ 16,000

○ 17,400

○ 18,000

QUESTION 5

Business Consultant (Tab 1)

Is it cheaper for a business to move freight by truck or rail? Long-haul shipments of at least 800 kilometers that weigh between 22,500 and 36,000 kilograms are economical to move by either mode. However, special cargo like coal and heavier shipments are only economical to ship by rail, and short-haul shipments are only economical to ship by truck.

The average cost to transport freight by truck varies, ranging from €0.1021 per ton- kilometer (where 1 ton = 1,000 kilograms) for shipments less than 400 kilometers, to €0.0371 per ton-kilometer for shipments more than 800 kilometers. The aggregated average cost for all rail shipments is approximately €0.0108 per ton-kilometer and is €0.0129 per ton-kilometer for intermodal shipments—those involving both trains and trucks. Intermodal shipments use trucking-trailers carried on flatbed railcars, allowing cargo to move between trucks and trains without having to be loaded into different containers.

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Rail Advocate (Tab 2)

Trucks operate on publicly financed highways. However, freight railroad companies pay nearly all costs related to their tracks, bridges, and tunnels. From 1980 to 2009, railroads reinvested approximately $325 billion of their own funds - approximately 30 percent of their total revenue - to maintain and improve their tracks and machinery. To reduce this disparity, we propose tax incentives for any project that expands freight rail capacity. The benefits to the public of such incentives would far exceed their cost. Railroads are more fuel efficient than trucks. For example, shifting 10 percent of the long-distance freight that currently moves only by truck to rail instead would save 4 billion liters of fuel per year. In addition to their better fuel economy, using railroads helps reduce roadway congestion.

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Question #1

For each of the following questions about the freight railroad companies mentioned in the tabs, select *Can be determined* if it can be answered solely on the basis of the information provided. Otherwise, select *Cannot be determined*.

Can be determined	Cannot be determined	
○	○	What percentage of their revenue did freight railroad companies spend to maintain tracks and machinery from 1980 to 2009?
○	○	On average, do freight railroad companies buy more fuel per year than freight trucking companies do?
○	○	Approximately how much revenue did freight railroad companies take in from 1980 to 2009?

Question #2

Based on the information provided, which one of the following best approximates the total amount of fuel that would be saved in the next 5 years if half of the long-haul freight that currently moves by truck were instead moved by train?

- ○ 4 billion liters
- ○ 9 billion liters
- ○ 20 billion liters
- ◉ 25 billion liters
- ○ 100 billion liters

For each of the following factors, select *Yes* if the information provided indicates that, with respect to that factor, shipping freight 1,000 kilometers by rail has an advantage over shipping freight 1,000 kilometers by truck. Otherwise, select *No*.

Yes	No	
○	○	Fuel efficiency
○	○	Total machinery maintenance costs
○	○	Transportation cost per unit of freight

TWO-PART ANALYSIS

QUESTION 1

State A currently allows casino gambling while State B does not. The legislature of State B is considering a proposal under which a limited number of casino licenses would be granted within the state in order to compete with State A for gambling revenue. Given the fact that a great many citizens of State B currently visit casinos in State A, the legislature of State B would be foolish not to enact this proposal.

In the table below, select one statement that would strengthen the proposal and another that would weaken it. Make exactly two selections, one in each column.

Would strengthen proposal	Would weaken proposal	Possible statements
		Some other states that have granted casino licenses have subsequently experienced an overall increase in revenue.
		The residents of State B who currently visit casinos in State A travel to State A primarily to visit a nature preserve that serves as a major tourist attraction.
		Currently, more State A residents than State B residents undertake international travel.
		Before State A offered casinos, those residents of State B who wanted to

		visit casinos had to travel nearly twice as far in order to do so.
		Most residents of State B who traveled to State A within the past year made the trip primarily to visit casinos.
		Over the past five years, the gambling revenue that State A has taken in has more than offset the associated infrastructure costs associated with gambling tourism.

QUESTION 2

Health advocate: The government's current farm-subsidy system primarily rewards large farms for planting monocultures of corn, soybeans, wheat, and rice. Most of the crops produced in this way go to feed livestock in factory farms, which results in a glut of fatty meats in the marketplace. A large proportion of such crops that are not used to feed livestock are used to make sugary processed foods. These subsidies promote unhealthy diets by making sugary foods and fatty meats artificially cheap. Obviously, it is important for the government to avoid these effects.

On the basis of the information above, select Recommends for the option that describes the government action that the health advocate most likely recommends, and select Intended for the option that describes what the health advocate likely hopes will be the result of that action. Make only two selections, one in each column.

Recommends	Intended	Statements
		Improve the overall quality of livestock feed
		Improve the overall quality of people's diets
		Reduce the overall financial cost of people's diets
		Prevent the manufacture of sugary processed food
		Change the farm-subsidy system

QUESTION 3

It costs a certain company $100 to buy each unit of X, $200 for each unit of Y, and $300 for each unit of Z. The company then sells each unit of X for $200, each unit of Y for $300, and each unit of Z for $400. There are no other costs or revenue associated with X, Y, or Z. The company wants to select one of the following goals to prioritize.

A. Buy and then sell 3 units of X, 5 units of Y, and 4 units of Z.

B. Buy and then sell 2 units of X, 2 units of Y, and 3 units of Z.

C. Buy and then sell 8 units of X, 1 unit of Y, and 1 unit of Z.

D. Buy and then sell 2 units of X, 4 units of Y, and 2 units of Z.

E. Buy and then sell 1 unit of X, 4 units of Y, and 5 units of Z.

Select the goal that the company should prioritize to minimize its total Cost for X, Y, and Z and the goal that the company should prioritize to maximize its total Gross profit for X, Y, and Z. Make only two selections, one in each column.

Cost	Gross profit	
		(A)
		(B)
		(C)
		(D)
		(E)
		(F)

QUESTION 4

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 certrizine 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 5

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
		100
		140
		280

TABLE ANALYSIS

QUESTION 1

The table gives 2007 tax return information from 15 counties. The data show not only the total number of returns and exemptions but also totals for several specific kinds of income and for total gross adjusted income. Monetary amounts are shown in thousands of dollars.

County Name	Total Number of Tax Returns	Total Number of Exemptions	Adjusted Gross Income (in thousands of dollars)	Wage and Salary Income (in thousands of dollars)	Dividend Income (in thousands of dollars)	Interest Income (in thousands of dollars)
Fairfield County, CT	377435	774795	44649036	30987375	1505206	1811179

County Name	Total Number of Tax Returns	Total Number of Exemptions	Adjusted Gross Income (in thousands of dollars)	Wage and Salary Income (in thousands of dollars)	Dividend Income (in thousands of dollars)	Interest Income (in thousands of dollars)
Hartford County, CT	414763	811989	27591077	20537275	645116	829212
Litchfield County, CT	88238	177163	6056911	4198571	168973	217433
Middlesex County, CT	76919	151197	5655280	4122290	147055	199887
New Haven County, CT	391134	764137	23646340	17638377	515788	715448
New London County, CT	127016	248639	7949645	5713823	195126	223626
Tolland County, CT	62610	127963	4474569	3388626	75163	113720
Windham County, CT	54143	106754	2674283	2090782	40042	65913
Kent County, DE	69851	143924	3258015	2392279	38079	77330
New Castle County, DE	239897	485318	15435639	11544348	430203	422256
Sussex County, DE	88031	169074	4289549	2540878	110551	178622
Kent County, RI	83456	159143	4805962	3648022	73671	136005

County Name	Total Number of Tax Returns	Total Number of Exemptions	Adjusted Gross Income (in thousands of dollars)	Wage and Salary Income (in thousands of dollars)	Dividend Income (in thousands of dollars)	Interest Income (in thousands of dollars)
Newport County, RI	38878	73616	2584689	1701831	79147	93629
Providence County, RI	294616	555294	13416623	10303016	225500	411691
Washington County, RI	56771	112683	3995470	2684024	102475	132059

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 these counties. For each statement indicate whether it is "True" or "False," based on the information provided in the table.

True	False	
		If a county had a greater total number of tax returns than another, it also had a greater total number of exemptions.
		The ratio of wage and salary income to the sum of dividend income and interest income is greater in the county with the greatest adjusted gross income than in the county with the fourth-greatest adjusted gross income.
		No county has greater adjusted gross income per tax return than Hartford County, CT.

QUESTION 2

Twelve films participated in the World Documentary Competition at the Sundance Film Festival in 2005. Each film was shot either in color or in both color and black & white (b/w).

Attachment:

Sort by: -- SELECT --

Film	Country/ies
The 3 Rooms of Melancholia	Finland
Dhakiyarr vs. the King	Australia
Grizzly Man	USA, Canada
I Am Cuba, the Siberian Mammoth	Brazil
El Inmortal	Spain, Nicaragua, Mexico
The Liberace of Baghdad	United Kingdom
Odessa Odessa	France, Israel
Shake Hands with the Devil: The Journey of Romeo Dallaire	Canada
Shape of the Moon	Netherlands
Unknown White Male	United Kingdom
Wall	France, Israel
Yang Ban Xi: The 8 Model Works	Netherlands

For each of the following statements, select Would help explain if it would, if true, help to explain some of the information in the table. Otherwise, select Would not help explain.

Would not help explain	Would help explain	
		Longer films typically have higher budgets and are therefore better able to afford to use Sony HD.
		Films that are shot in more than two languages are more likely than those that are not to use a mix of color and black & white film in order to highlight cultural differences.
		The shorter the documentary, the more likely the producers are to save money

		by filming in just one language.

QUESTION 3

Year of Business Expense (all expenses in millions of dollars)	Salary	Rent	Facility Maintenance	Equipment Purchase	Utilities	Stock Dividends	Interest Payments	Research & Development
2000	43.24	0.23	1.2	15	0.2	4.362	21.4	4.2
2001	44.53	0.25	2.1	19	0.6	5.291	23.7	4.7
2002	39.72	0.28	1.5	14	0.1	4.778	26.8	6.4
2003	42.94	0.31	1.5	33	0.5	3.224	32.5	5.3
2004	41.36	0.31	2.3	9	0.7	5.645	19.6	5.9
2005	43.37	0.34	1.1	21	1.2	5.273	22.3	6.6
2006	44.02	0.33	1.6	13	0.3	6.316	25.4	6.2
2007	46.51	0.36	2.4	27	0.6	6.829	18.1	5.1

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.

For each of the following statements, indicate whether it accurately represents the data for 2004. Indicate "Yes" if the statement is accurate and "No" if the statement is not.

Yes	No	
		Rent paid was equal to the median rent paid for the eight-year period.
		The total cost in the categories shown decreased as compared to 2003.
		Interest payments experienced the highest year-over-year drop for the eight-year period.

QUESTION 4

Restaurant	Year Opened	Open 7 Days?	Cuisine	Other Locations?	Locally Owned?
Allegria	2005	Yes	Italian	No	No
Country Kitchen	2001	No	American fare	No	No
Dargan's	2002	Yes	Irish	Yes	No
Dhaba	1982	No	Indian	No	Yes
El Rey	1986	Yes	Southwestern	No	Yes
Ernesto's	1994	Yes	Italian	No	Yes
Gratzi	1972	No	Italian	No	Yes
Ironwood	2006	Yes	American fare	No	Yes
Palio	1978	No	Italian	No	Yes
Watermark Grille	2011	No	Seafood	Yes	No

The table above displays information about the ten restaurants that are members of a city's Main Street Restaurant Association. One of the association's goals is to ensure that the city has many locally-owned, unique (i.e. not part of a chain with several locations) restaurants serving a variety of cuisine seven days a week.

In the grid, select "True" if the statement is true based on the data in the table and "False" if it is not.

True	False	
		More than 70% of the restaurants that are a single location are also locally owned.
		Among the locally-owned restaurants, the median year opened is 1982.
		At least half of the locally-owned restaurants serve Italian food.

QUESTION 5

The table contains data on nine roller coasters located in the United States.

Roller Coaster Name	Year Built	Length (feet)	Height (feet)	Maximum Vertical Angle (degrees)	Top Speed (miles per hour)	Type	Capacity (riders per hour)
Cyclone	1927	2640	85	59	60	Wooden	1440
Ghost Rider	1998	4533	118	51	56	Wooden	1600
Loch Ness Monster	1978	3240	130	55	60	Metal	800
Goliath	2000	4573	235	61	85	Metal	1600
Boulder Dash	2000	4725	110	59	60	Wooden	1800
El Toro	2006	4400	181	76	70	Wooden	1500
Millennium Force	2000	6595	310	80	93	Metal	1300
Fury 325	2015	6602	325	81	95	Metal	1470
Revolution	1976	3457	113	45	55	Metal	1400

For each of the following statements, select Yes if the statement can be shown to be true based on the information in the table. Otherwise, select No.

Yes	No	
		Both the roller coaster with the lowest capacity and the roller coaster with the highest capacity are metal roller coasters.
		The range in top speed (in miles per hour) is greater than the range in maximum vertical angle (in degrees).
		No wooden roller coaster has a height greater than the median of all of the roller coasters.