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Logical reasoning

Logical game

The government of an island nation is in the process of deciding how to spend its limited income. It has $7 million left in its budget and eight programs to choose among. There is no provision in the constitution to have a surplus, and each program has requested the minimum amount they need; in other words, no program may be partially funded. The programs and their funding requests are:

* Hurricane preparedness: $2.5 million

* Harbor improvements: $1 million

* School music program: $0.5 million

* Senate office building remodeling: $1.5 million

* Agricultural subsidy program: $2 million

* National radio: $0.5 million

* Small business loan program: $3 million

* International airport: $4 million

1. Senators from urban areas are very concerned about assuring that there will be funding for a new international airport. Senators from rural areas refuse to fund anything until money for agricultural subsidies is appropriated. If the legislature funds these two programs, on which of the following could they spend the rest of the money?

A. the school music program and national radio B. hurricane preparedness

C. harbor improvements and the school music program

D. small business loan program E. national radio and senate office building remodeling

Answer: Option A

The total cost of the school music program and national radio is $1 million, the amount left after the international airport and agricultural subsidies are funded.

International airport + Agricultural subsidy program

$4 million + $2 million = $6 million

school music program and national radio is $1 million.

Hence, Total $7 million.

2. If the legislature decides to fund the agricultural subsidy program, national radio, and the small business loan program, what two other programs could they fund?

A. harbor improvements and international airport

B. harbor improvements and school music program

C. hurricane preparedness and school music program

D. hurricane preparedness and international airport

E. harbor improvements and hurricane preparedness

Answer: Option B

The only two programs that total 1.5 million dollars are the harbor improvements and school music program.

3. If the legislature decides to fund the agricultural subsidy program, national radio, and the small business loan program, the only other single program that can be funded is

A. hurricane preparedness. B. harbor improvements. C. school music program.

D. senate office building remodeling. E. international airport. Answer: Option D

The total of the three programs (2 million + 0.5 million + 3 million) is 5.5 million. That leaves 1.5 million (7 million - 5.5 million), and the only single program needing that amount is the senate office building remodeling.

At a small company, parking spaces are reserved for the top executives: CEO, president, vice president, secretary, and treasurer with the spaces lined up in that order. The parking lot guard can tell at a glance if the cars are parked correctly by looking at the color of the cars. The cars are yellow, green, purple, red, and blue, and the executives names are Alice, Bert, Cheryl, David, and Enid.

* The car in the first space is red.

* A blue car is parked between the red car and the green car.

* The car in the last space is purple.

* The secretary drives a yellow car.

* Alice's car is parked next to David's.

* Enid drives a green car.

* Bert's car is parked between Cheryl's and Enid's.

* David's car is parked in the last space.

1. Who is the secretary?

A. Enid B. David C. Cheryl D. Bert E. Alice Answer: Option E

Cheryl cannot be the secretary, since she's the CEO, nor can Enid, because she drives a green car, and the secretary drives a yellow car. David's, the purple car, is in the last space. Alice is the secretary, because her car is parked next to David's, which is where the secretary's car is parked.

2. Who is the CEO ?

A. Alice B. Bert C. Cheryl D. David E. Enid Answer: Option C

The CEO drives a red car and parks in the first space. Enid drives a green car; Bert's car is not in the first space; David's is not in the first space, but the last. Alice's car is parked next to David's, so Cheryl is the CEO.

3. What color is the vice president's car?

A. green B. yellow C. blue D. purple E. red Answer: Option A

The vice president's car cannot be red, because that is the CEO's car, which is in the first space. Nor can it be purple, because that is the treasurer's car, which is in the last space, or yellow, because that is the secretary's. The president's car must be blue, because it is parked between a red car (in the first space) and a green car, which must be the vice president's.

Five cities all got more rain than usual this year. The five cities are: Last Stand, Mile City, New Town, Olliopolis, and Polberg. The cities are located in five different areas of the country: the mountains, the forest, the coast, the desert, and in a valley. The rainfall amounts were: 12 inches, 27 inches, 32 inches, 44 inches, and 65 inches.

* The city in the desert got the least rain; the city in the forest got the most rain.

* New Town is in the mountains.

* Last Stand got more rain than Olliopolis.

* Mile City got more rain than Polberg, but less rain than New Town.

* Olliopolis got 44 inches of rain.

* The city in the mountains got 32 inches of rain; the city on the coast got 27 inches of rain.

1. Which city got the most rain?

A. Last Stand B. Mile City C. New Town D. Olliopolis E. Polberg Answer: Option A

Olliopolis got 44 inches of rain. Last Stand got more rain than that, so it got 65 inches, which is the most.

2. How much rain did Mile City get?

A. 12 inches B. 27 inches C. 32 inches D. 44 inches E. 65 inches Answer: Option B

Olliopolis got 44 inches of rain, Last Stand got 65, and Polberg got 12. New Town is in the mountains, and the city in the mountains got 32 inches of rain. Therefore, Mile City got 27.

3. Which city is in the desert ?

A. Last Stand B. Mile City C. New Town D. Olliopolis E. Polberg Answer: Option E

The city that got the least rain is in the desert. New Town is in the mountains. Last Stand got more rain than Olliopolis, so it cannot be the city with the least rain; also,Mile City cannot be the city with the least rain. Olliopolis got 44 inches of rain. Therefore, Polberg is in the desert and got 12 inches of rain.

4. Where is Olliopolis located?

A. the mountains B. the coast C. in a valley D. the desert E. the forest

Answer: Option C

Olliopolis got 44 inches of rain, so it is not in the desert or the forest. The city in the mountains got 32 inches of rain; the coast 27. Therefore, Olliopolis is in a valley.

Five roommates Randy, Sally, Terry, Uma, and Vernon each do one housekeeping task mopping, sweeping, laundry, vacuuming, or dusting one day a week, Monday through Friday.

* Vernon does not vacuum and does not do his task on Tuesday.

* Sally does the dusting, and does not do it on Monday or Friday.

* The mopping is done on Thursday.

* Terry does his task, which is not vacuuming, on Wednesday.

* The laundry is done on Friday, and not by Uma.

* Randy does his task on Monday.

1. What task does Terry do on Wednesday?

A. vacuuming B. dusting C. mopping D. sweeping E. laundry Answer: Option D

Terry does not dust, mop, do laundry, or vacuum. Therefore, Terry does the sweeping on Wednesday.

2. What day does Uma do her task?

A. Monday B. Tuesday C. Wednesday D. Thursday E. Friday Answer: Option D

Uma does the mopping, which is done on Thursday.

3. What task does Vernon do?

A. vacuuming B. dusting C. moppin D. sweeping E. laundry Answer: Option E

Vernon does not vacuum, dust, or sweep. Randy does the vacuuming, Sally does the dusting, Terry does the sweeping—leaving laundry and mopping for Uma and Vernon. Uma does not do laundry; therefore, she must mop, and Vernon does the laundry.

4. What day is the vacuuming done?

A. Friday B. Monday C. Tuesday D. Wednesday E. Thursday Answer: Option B

Dusting is on Tuesday, sweeping is on Wednesday, mopping is on Thursday, and laundry is on Friday. Therefore, the vacuuming is done on Monday.

5. When does Sally do the dusting?

A. Friday B. Monday C. Tuesday D. Wednesday E. Thursday Answer: Option C

Dusting must be done on Tuesday, Wednesday, or Thursday. However, the mopping is done on Thursday, and Terry does his task on Wednesday. Therefore, Sally does the dusting on Tuesday.

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Computation የበዛበት ጊዜ ላይ ስላለን ታሪክ ለመቀየር ለስኬት ዛሬ ጀምራችሁ ተነሱ

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Thank You

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