Chiquita Republic's Fire Red Shirt

0 points possible (ungraded)

Chiquita Republic is a chain of one thousand apparel stores located across Europe selling high-end clothing to a young demographic, with appealing designs at reasonable prices. You have been hired by Chiquita Republic as marketing manager for some of their products. One of these products, affectionately known as the *Fire Red Shirt* and identified with the SKU# 20139, seems to be performing well, so you have been keeping an eye on its sales across Europe.

Based on data from earlier in the year, you know that demand for SKU# 20139 in any one of Chiquita Republic's one thousand stores across Europe seems to be uniformly distributed between 0 and 8 units of the Fire Red Shirt sold in that store on that business day. This means that, at the end of any given business day, any one of the one thousand stores in Europe is equally likely to report 0, 1, 2, 3, 4, 5, 6, 7 or 8 units of SKU# 20139 sold that day in that store.

Question 1

This morning, when you got to the office, you decided to print out four charts, summarizing yesterday's sales of four different SKUs in all of Chiquita Republic's one thousand stores across Europe. One of these charts pertains to SKU# 20139, and the other three are about other SKUs. Each graph tells you the relative frequency with which a given number of units of that SKU were sold across the one thousand stores. For example, the first bar in the top left graph says that approximately 10% of Chiquita Republic's stores (or about 100 stores) sold 0 units of that SKU during the business day yesterday.

Unfortunately, you forgot to label the charts, and you tripped on the way back from the printer, and the charts got shuffled, so you are no longer certain about which one of the four charts corresponds to yesterday's sales of the Fire Red Shirt. Determined to figure this out through the

magic of statistical insight, you lay out the four charts in front of you in the desk, and write a letter on the upper left corner of each graph: A, B, C and D.

Given what you know about the nature of the demand of the Fire Red Shirt in stores across Europe, which one of the four charts is most likely to be the chart for yesterday's sales of SKU# 20139 at the store level?

- (●) Graph A
- ( ) Graph B
- ( ) Graph C
- ( ) Graph D

Submit You have used 1 of 3 attempts

Correct

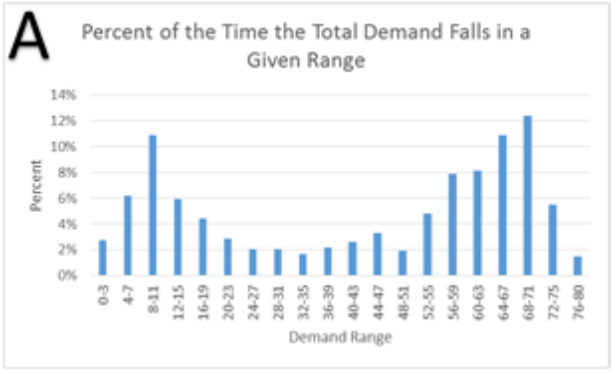
Question 2

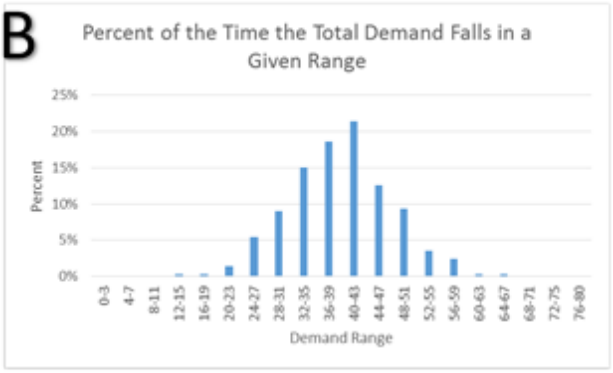
0 points possible (ungraded)

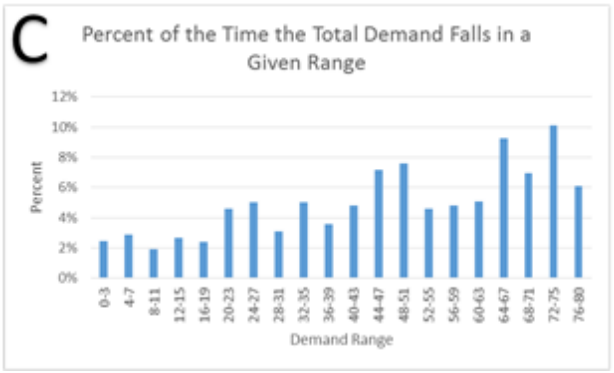
You are having a terrible day in terms of balance, because - while coming back from the printer a second time - you tripped again, and a new batch of charts that you were carrying got mixed up. This time, the charts involved in the incident were not about demand at the store level, but the demand at the distribution center (DC) level of four SKUs, one of them the Fire Red Shirt.

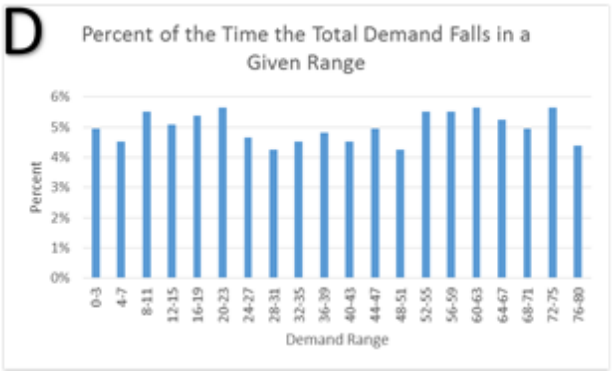
Chiquita Republic has several dozen distribution centers spread around Europe, and each DC serves approximately several dozen stores every day. The daily demand for a given SKU as seen by a DC is an aggregate of the daily demands of that SKU in the stores served by that DC.

Since you know what the demand for SKU# 20139 looks like at the store level, you think you can apply your wide statistical knowledge to the crucial question of figuring out which one of the four charts coresponds to the demand for the Fire Red Shirt at the DC level.









Which one of these four charts is most likely to correspond to the demand for SKU# 20139 at the DC level?

- Graph A
- Graph B
- Graph C
- Graph D

Submit You have used 1 of 3 attempts

Correct

Question 3

0 points possible (ungraded)

Another one of Chiquita Republic's products that is under your supervision is SKU# 20142, the world-famous Paradise Breeze Sandals. The sales of Paradise Breeze Sandals skyrocket when the weather is warm and breezy, and plummet when the weather is cold and rainy. When you realized the relationship between the weather and sales, a few months ago, you asked the stores to start including in their daily reports a note on their local weather. Yesterday, half of Chiquita Republic's stores reported warm and breezy weather, while the other half reported cold and rainy weather.

Now, you remember the four graphs with store level demand that you mixed up when you tripped on your way back from the printer the first time? One of them was for the Fire Red Shirt, but another one was for the Paradise Breeze Sandals. Below are these four charts again.

Which one of these charts is most likely to be the one for demand for SKU# 20142 at the store level?

- ○ Graph A
- ○ Graph B
- ○ Graph C
- ◉ Graph D

Submit You have used 1 of 3 attempts

Correct