## Hands-on Analysis Quiz 2 Solutions



1) If 2013 Sales numbers were expected to increase by $\mathbf{1 0 \%}$ in the following year in all customer segments, what would be the total estimated sales for Home Office in 2014?
C 617,498
$c$
679,248
C $2,385,847$

Create a new calculated field called $110 \%$ of Sales:

$$
110 \% \text { of Sales }
$$

```
[Sales]*1.1
```

Drag Sales into the view and filter on Home Office:


Filter on Year of Order Date $=2013$

| Filter [Year of Order Date] |  |  | $x$ |
| :---: | :---: | :---: | :---: |
| General | Condition | Top |  |
| © Select | from list $\bigcirc$ | stom value list $\bigcirc$ Use all | \# |
| Enter search text |  |  |  |
| $\square 2010$$\square$$\square$$\square$$\square$$\square$$\square$ |  |  |  |

Your view should looks like this:


Double-click the new field " $110 \%$ of Sales" to add it to the view:


So we found the total sales for the Home Office segment in $2013(\$ 617,498)$ and then increased this value by $10 \%$ to get the 2014 projection.
2) Which product has the highest ship cost to sales ratio?

C Hoover® Commercial Lightweight Upright Vacuum
O Accohide Poly Flexible Ring Binders
C Kensington 7 Outlet MasterPiece Power Center with Fax/Phone Line Protection
C Lexmark 4227 Plus Dot Matrix Printer

Create a calculated field for ship cost to sales ratio.

| Ship Cost to Sales Ratio |  |
| :--- | :--- |
| sum ([Shipping Cost])/sum ([Sales]) |  |
|  |  |
|  |  |
| The calculation is valid. | Apply |

The sums in the numerator and denominator ensure that we will calculate the total shipping cost divided by the total sales for the specified level of granularity in our view, rather than just calculating the shipping cost to sales ratio for each row in our data and then aggregating the result.

Add the new field and the "Product Name" field to the view:

| Pages |  |  | fill Columns |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | \# Rows | Product Name |  |
| Filters |  |  |  |  |  |
|  |  |  | Product Name |  |  |
|  |  |  | 1.7 Cubic Foot Compact " Cu .. |  | 0.030 |
| Marks |  |  | 1/4 Fold Party Design Invitat.. |  | 0.132 |
|  |  |  | 3.5" IBM Formatted Diskette.. <br> 3.6 Cubic Foot Counter Heig.. |  | 0.056 |
| Abc Automatic |  | - |  |  | 0.013 |
| Color |  |  | 3M Hangers With Command.. |  | 0.030 |
|  | Size | Text |  |  | 0.018 |
|  |  |  | 3M Orga |  | 0.136 |
| Detail | Tooltip |  | 3M Polarizing Light Filter SI.. |  | 0.014 |
|  |  |  |  |  | 0.025 |
|  |  |  | $6^{\prime \prime}$ Cubicle Wall Clock, Black |  | 0.056 |
|  |  |  | 9-3/4 Diameter Round Wall .. |  | 0.058 |

Sort:


We can now see the product with the highest ship cost to sales ratio:

3)Find the customer with the highest profit. What is his or her average shipping cost per order?
[Hint: to calculate the shipping cost per order you will need to calculate the number of orders using the count distinct function]
66.72

C
10.49

C
C $\quad 12.18$

Add Customer Name and Shipping Cost to the view, then sort by Shipping cost to see the customer with the highest profit:

| Pages |  | IIl Columns | Measure Names |  |
| :---: | :---: | :---: | :---: | :---: |
|  |  | ERows | Custom | $\pm$ |
| Filters |  | Customer Name |  | Profit |
| Measure Names |  | Andrea Shaw |  | 17,537 |
|  |  | Cathy Hutchinson |  | 17,307 |
| Marks |  | Nina Horne Kelly |  | 16,432 |
|  |  | Marie Danie |  | 12,512 |
| Abc Automatic | $\checkmark$ | Jesse Williams Katz |  | 11,821 |
|  |  | Deborah Paul |  | 11,080 |
| Color Size | $\begin{aligned} & 1233 \\ & \text { Text } \end{aligned}$ | Dwight Albright Huffman |  | 10,428 |
|  |  | Helen Stein |  | 9,819 |
| Detail |  | Richard McClure |  | 9,701 |
| Detail Tookip |  | Leigh Burnette Hurley |  | 9,290 |
| ${ }_{123}^{\text {Abc }}$ Measure Values |  | Annie Odom |  | 9,244 |
|  |  | Lester Stuart |  | 9,249 |
|  |  | Edna Pierce |  | 9,118 |
| Measure Values | - | Grace Vaughn |  | 8,956 |
| SUM(Profit) |  | Christopher Meadows |  | 8,805 |

Calculate the shipping cost per order by dividing the total shipping cost by the number of orders. The number of order can be calculated using the count of the distinct order ids:

```
Calculation1
sum([Shipping Cost])/countd([Order ID])
```

- 

The calculation is valid

> Apply

OK

Add this new field to the view:

| IIII Columns | Measure Names |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
| \# Rows | Customer Name | 3 |  |  |
| Customer Name |  | Profit | Shipping Cost Per Order |  |
| Andrea Shaw |  | 17,537 | 12.59 | * |
| Cathy Hutchinson |  | 17,307 | 32.18 |  |
| Nina Horne Kelly |  | 16,432 | 34.02 |  |
| Marie Daniel |  | 12,512 | 8.98 |  |

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