QlikView Designer 11.2

Set Analysis

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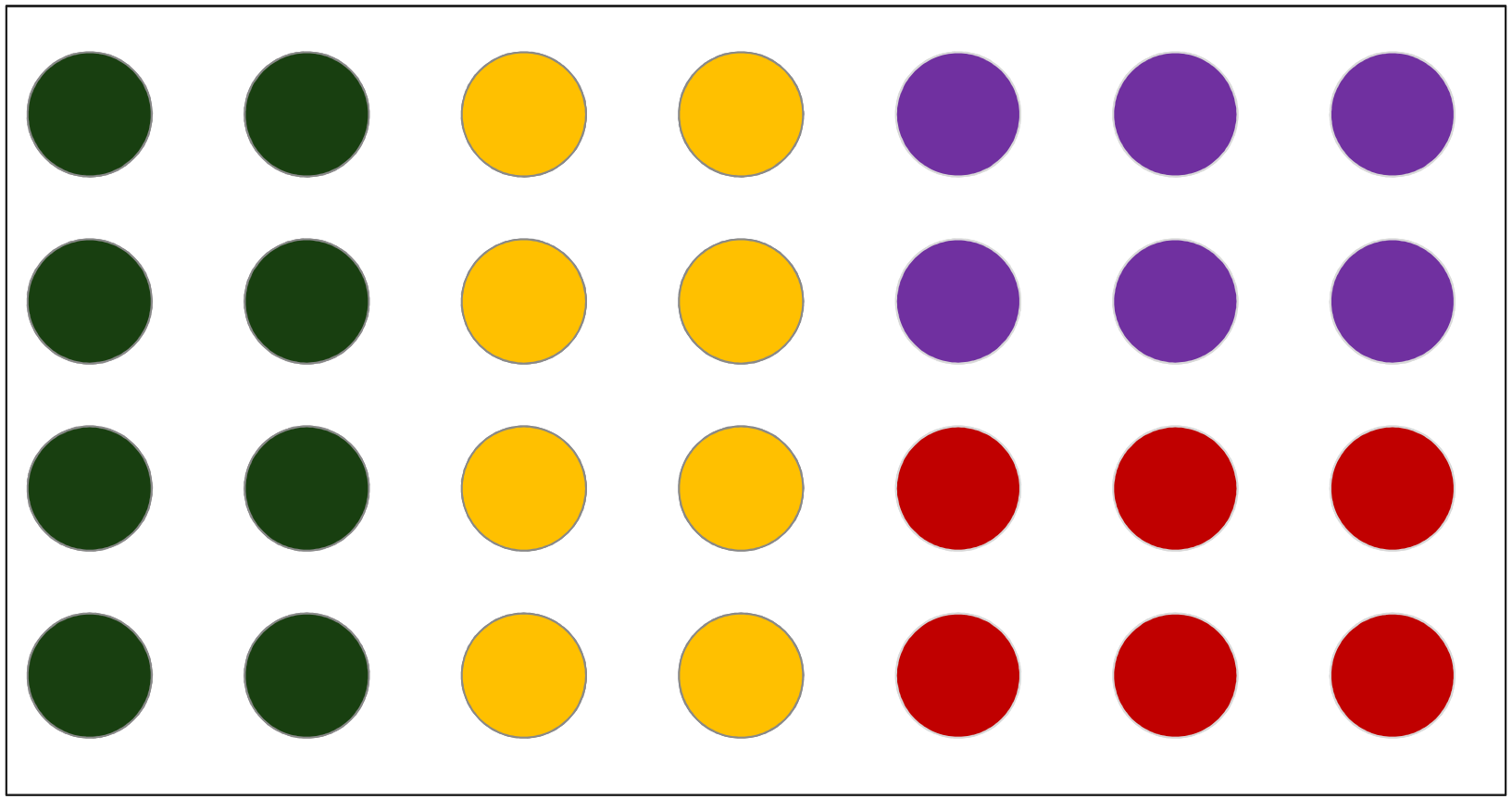
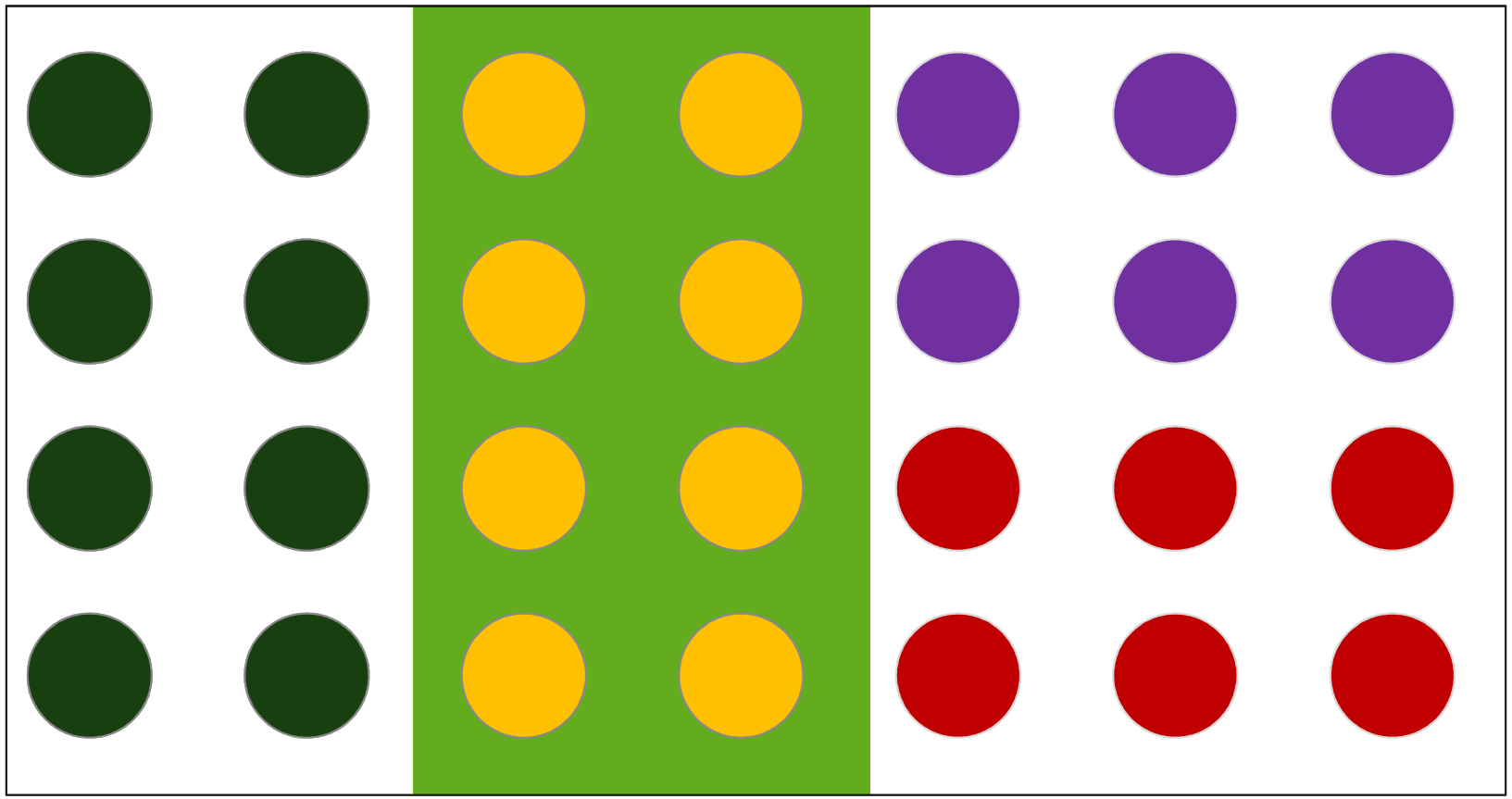
2014

SET ANALYSIS BASICS



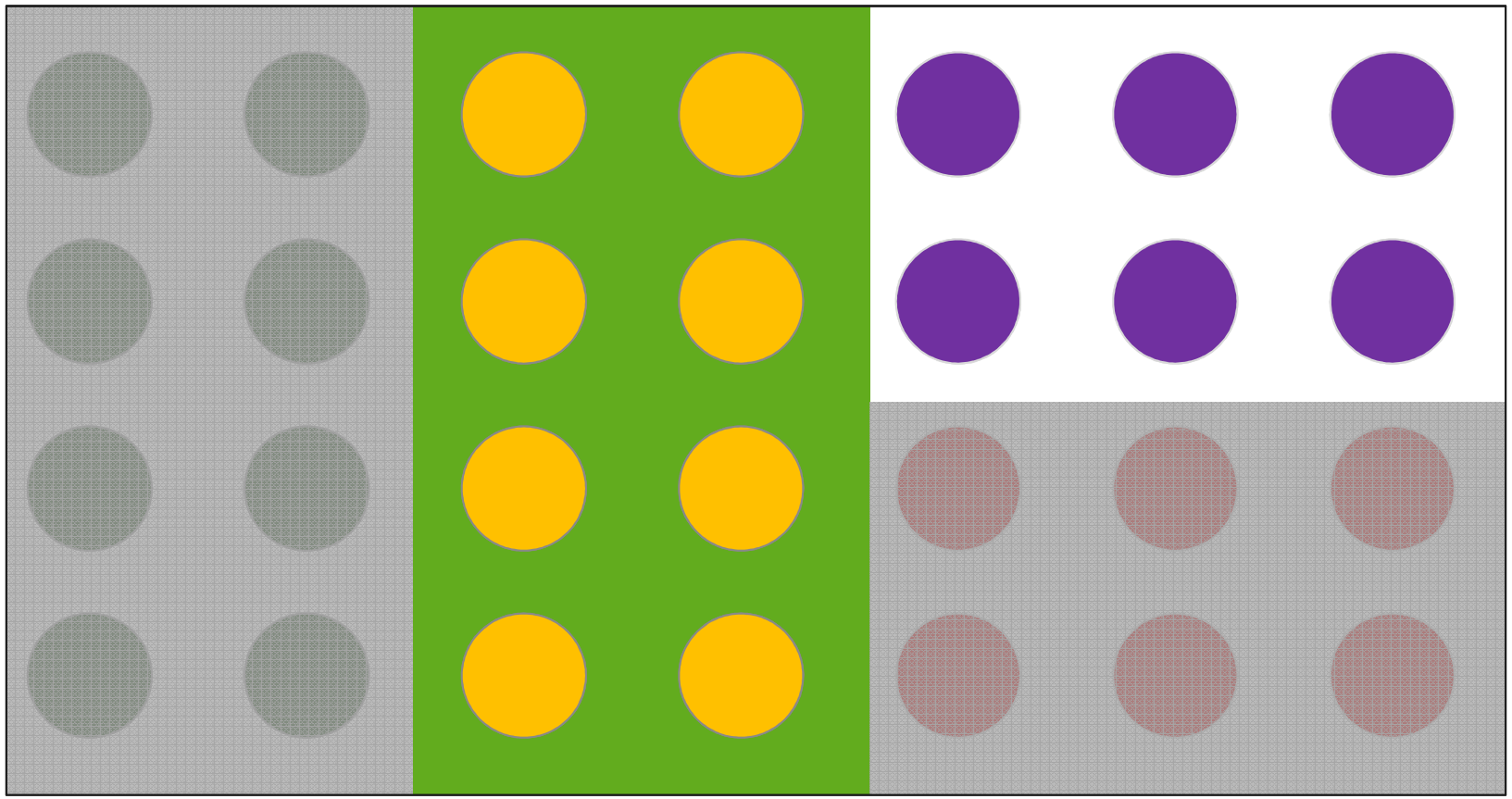
Customer has purchased *Dots* in different colors

SET ANALYSIS BASICS



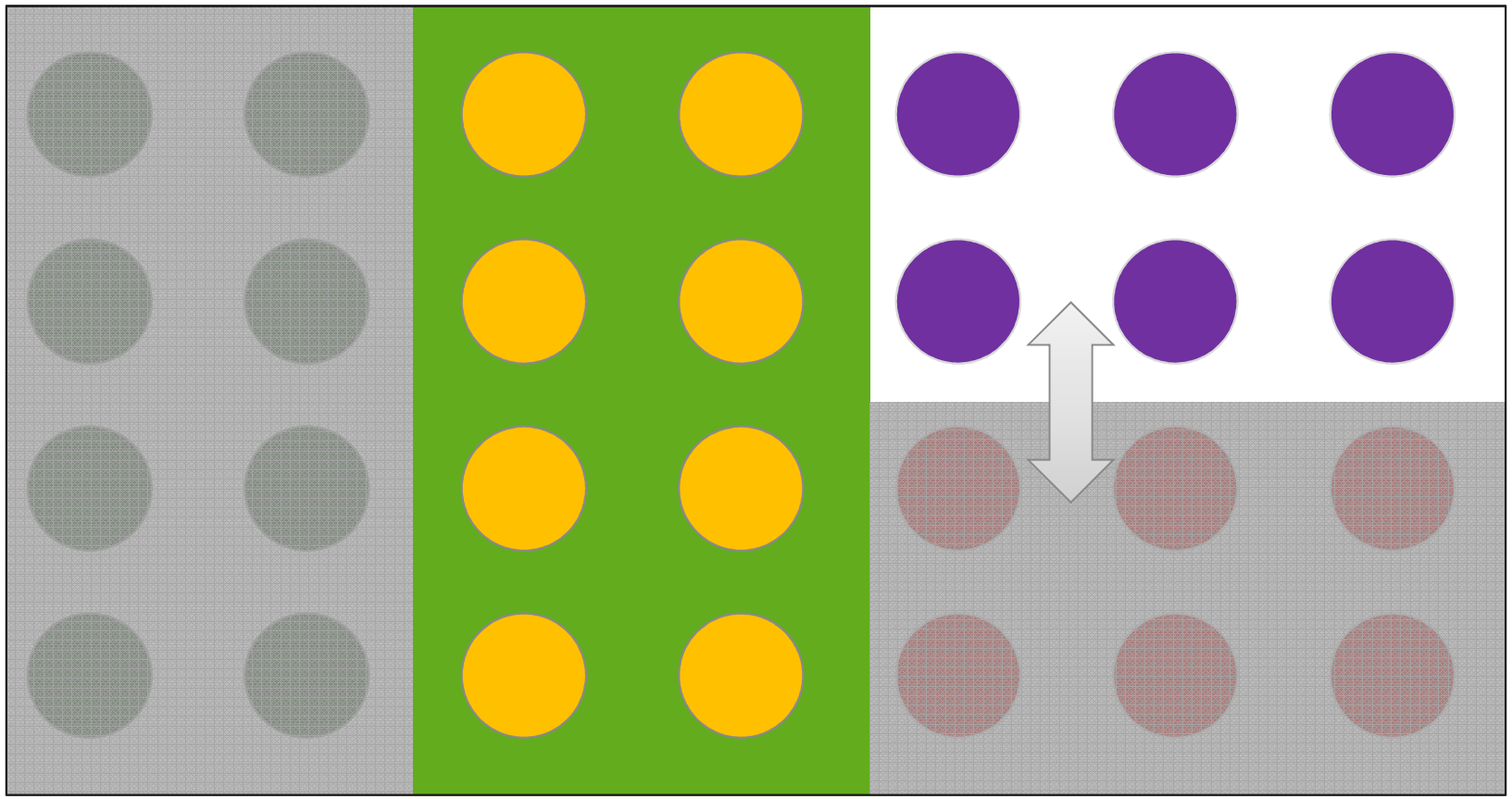
Current Selection: *Yellow Dots*
Customer has purchased *Yellow Dots*

SET ANALYSIS BASICS



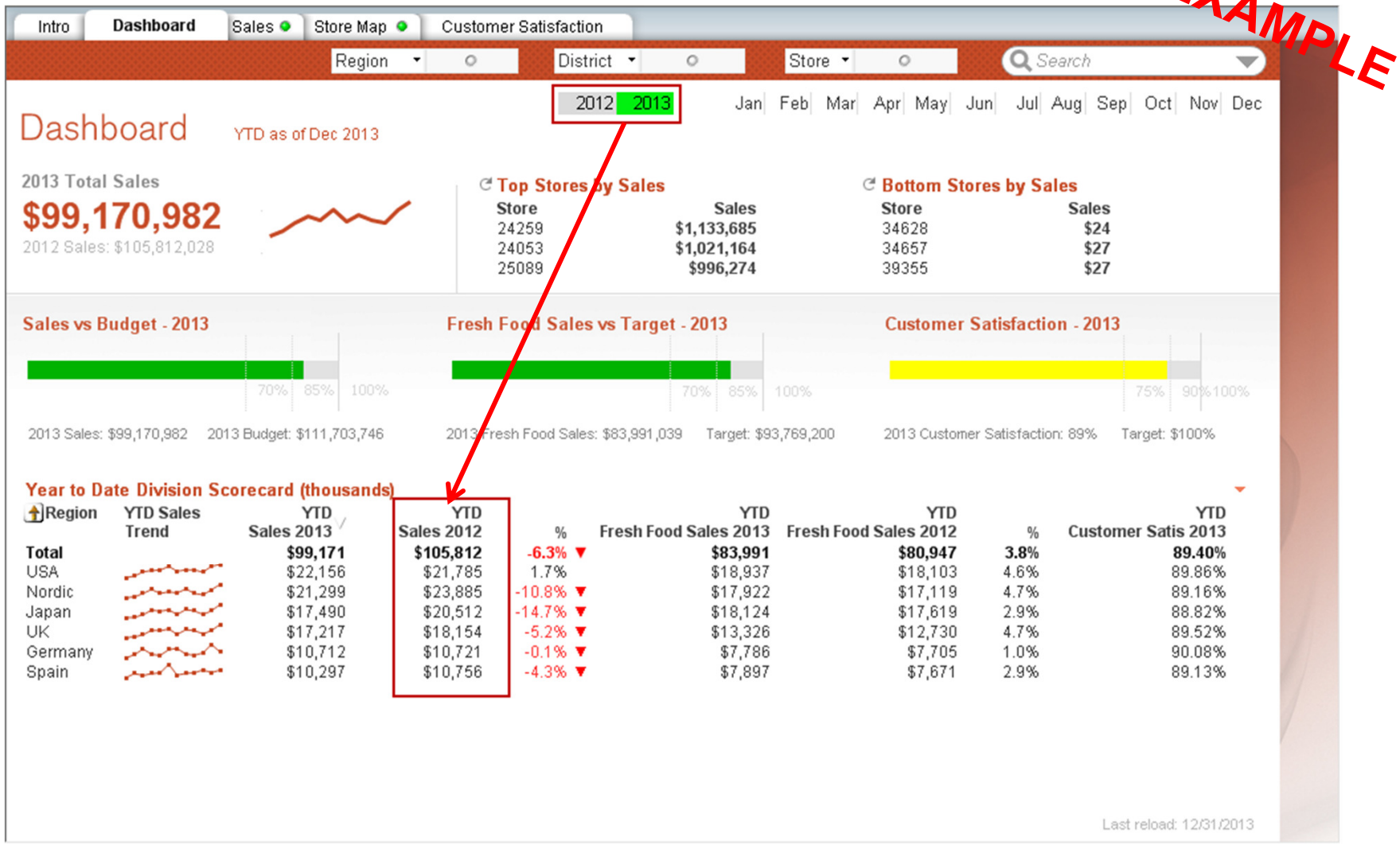
Current Selection: *Yellow Dots*
Customer has purchased *Yellow Dots and* has also purchased *Purple Dots*

SET ANALYSIS BASICS



Current Selection: *Yellow Dots*
What if we want to *Show the Ratio between Purple Dots and Red Dots?*

Retail store performance dashboard



SET ANALYSIS

What is it?

Aggregation functions (sum, count, average, etc.) normally aggregate over the set of possible records defined by the current selection

```
sum(LineSalesAmount)
```

An alternative set of records can be defined by a set expression

```
sum({$<Year={2008}>}LineSalesAmount)
```

SET ANALYSIS

What is it?

- It is similar to a selection
- Set expressions always begin and end with curly brackets { }
- Can only be used in aggregation functions
- Provides a method of defining groups (sets) of information that are independent of the current selections

SET ANALYSIS

Why we need it?

- Very powerful tool for **comparison analysis**
  - This year vs. last year
  - Products purchased vs. not purchased
- Provides much more **flexibility** in the analysis you can create
  - Expressions can be added for data outside of your current selection criteria
- **Eliminates** the need for additional, **complex script coding**

SET ANALYSIS

How do we use it?

- **Set Basic Components:**
  - **SET IDENTIFIERS**
  - **SET OPERATORS**
  - **SET MODIFIERS**

SET ANALYSIS

How do we use it?

- Set Basic Components:
  - SET IDENTIFIERS

```
sum({Identifier}LineSalesAmount)
```

SET IDENTIFIERS

Syntax

{1}	All data available to the Data Model
{$} or {$0}	Current Data Set (Green and White selections)
{BM01}	Data defined in bookmark BM01
{$1}	Returns data from the previous selection
{$2}…{$99}	Returns data from the previous 2-99 selections
{$_1}	Returns data from the Next Selection
{$_2}…{$_99}	Returns data from the Next 2-99 Selections

SET IDENTIFIERS

Activity

- Create a New Sheet to your application, called Set Analysis
- Add 4 List boxes (Country, Year, Quarter, Month)

- Create a dimensionless horizontal Straight Table to the new sheet, with the following columns (expressions):

```
sum(LineSalesAmount)

sum({1}LineSalesAmount)

sum({$}LineSalesAmount)
```

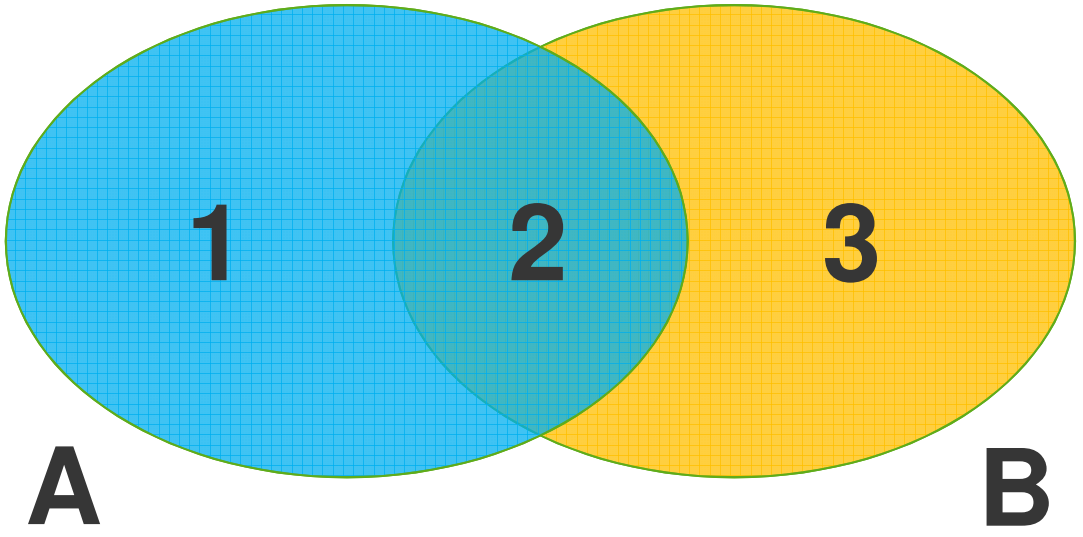
Observe the difference by selecting random values.

SET ANALYSIS

How do we use it?

- Set Basic Components:
  - SET IDENTIFIERS
  - **SET OPERATORS**

SET OPERATORS



+	UNION	(A + B)	1, 2, 3
-	EXCLUSION	(A – B)	1
*	INTERSECTION	(A * B)	2
/	SYMMETRIC DIFFERENCE (INVERSE OF THE INTERSECTION)	(A / B)	1, 3

SET OPERATORS

Activity

- Add the following line to your straight table as a new Expression:

```
sum({1-$}LineSalesAmount)
```

Observe the difference by selecting random values.

SET ANALYSIS

How do we use it?

- Set Basic Components:
  - SET IDENTIFIERS
  - SET OPERATORS
  - **SET MODIFIERS**

sum({ Identifier <Modifier> }LineSalesAmount)

<Field = {'Value'}>

SET MODIFIERS

Activity

Append the following Expressions to your Straight Table and observe their behaviour:

```
// Year 2012 always selected together with other selections
sum({$<Year={2012}>}LineSalesAmount)

// Year 2012 AND 2014 are always selected
sum({$<Year={2012, 2014}>}LineSalesAmount)

// Years 2012 AND 2014 AND Month June always selected
sum({$<Year={2012, 2014}, Month={Jun}>}LineSalesAmount)

// Years 2012 TO 2014 AND Month June always selected with other selections
sum({$<Year={'>=2012<=2014'}, Month={Jun}>}LineSalesAmount)

// Years 2012 TO 2014 AND Months starting with J selected with other selections
sum({$<Year={'>=2012<=2014'}, Month={'J*'}>}LineSalesAmount)

// Ignore selections on Year, Quarter and Month ONLY.
sum({$<Year=, Quarter, Month>}LineSalesAmount)
```

Thank You