1) What does FILTER(Sales, Sales[Amount] > 1000) return?

A table expression containing only rows from Sales where Amount > 1000, honoring the current filter context.

2) Measure: sum Amount where Amount > 1000 (using FILTER)

DAX

Копировать

Редактировать

```
High Sales =
CALCULATE( SUM(Sales[Amount]),
    FILTER ( Sales, Sales[Amount] > 1000 )
)
```

3) How does ALLEXCEPT(Sales, Sales[Region]) differ from ALL(Sales)?

ALLEXCEPT(Sales, Sales[Region]) removes all filters on Sales except the filter on Region.

ALL(Sales) removes all filters on every column of Sales (including Region).

4) Categorize Amount with SWITCH

(calculated column or measure)

DAX

Копировать

Редактировать

```
Amount Band =
SWITCH ( TRUE(),
    Sales[Amount] > 1000, "High",
    Sales[Amount] >= 500, "Medium",
    "Low"
)
```

5) Purpose of ALLSELECTED

Returns the rows selected by slicers/outer visuals while ignoring filters applied only by the current visual. Great for “% of total (respect slicers)” calculations.

6) Measure: Regional Sales % (each point vs its region total; uses ALLEXCEPT)

DAX

Копировать

Редактировать

```
Total Sales = SUM(Sales[Amount])

Regional Sales % =
DIVIDE(
    [Total Sales],
    CALCULATE ( [Total Sales], ALLEXCEPT(Sales, Sales[Region]) )
)
```

7) Dynamic measure toggling between SUM / AVERAGE / COUNT

Create a disconnected table Metric with rows: SUM, AVERAGE, COUNT.

DAX

Копировать

Редактировать

```
Selected Metric Value =
VAR m = SELECTEDVALUE ( Metric[Name], "SUM" )
RETURN
    SWITCH ( m,
        "AVERAGE", AVERAGE(Sales[Amount]),
        "COUNT",   COUNT(Sales[Amount]),
        [Total Sales]          -- SUM (default)
    )
```

8) Use FILTER inside CALCULATE to exclude Furniture

(assumes Products table related by ProductID)

DAX

Копировать

Редактировать

```
Sales (No Furniture) =
CALCULATE (
    [Total Sales],
    FILTER ( ALL ( Products[Category] ), Products[Category] <> "Furniture" )
)
```

9) Why might ALLSELECTED behave unexpectedly in a pivot/matrix?

ALLSELECTED depends on the current selection level. In a matrix, row/column totals have a broader filter context than detail rows, so the denominator can change, producing different results at totals vs. rows.

10) Measure: total sales ignoring Region

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Копировать

Редактировать

```
Total Sales (Ignore Region) =
CALCULATE ( [Total Sales], ALL ( Sales[Region] ) )
-- or: CALCULATE([Total Sales], REMOVEFILTERS(Sales[Region]))
```

11) Optimize this:

```
High Sales = CALCULATE(SUM(Sales[Amount]), FILTER(Sales, Sales[Amount] > 1000))
```

Better (boolean filter inside CALCULATE):

DAX

Копировать

Редактировать

```
High Sales (Optimized) =
CALCULATE ( [Total Sales], Sales[Amount] > 1000 )
```

12) Measure: Top 2 Products by sales (within current filters)

DAX

Копировать

Редактировать

```
Top 2 Products Sales =
VAR byProd =
    SUMMARIZE ( Sales, Sales[ProductID], "Amt", [Total Sales] )
VAR top2 = TOPN ( 2, byProd, [Amt], DESC )
RETURN SUMX ( top2, [Amt] )
```

13) Use ALLSELECTED() (no params) to respect slicers but ignore the visual's filters

DAX

Копировать

Редактировать

```
Total (AllSelected) =
CALCULATE ( [Total Sales], ALLSELECTED() )


% of AllSelected =
DIVIDE( [Total Sales], CALCULATE([Total Sales], ALLSELECTED()) )
```

14) Debug: a SWITCH measure returns wrong values after adding fields to a matrix

Likely cause: the selector uses SELECTEDVALUE which becomes blank (or ambiguous) at totals/multiple members; or the measure wasn't scoped for totals.

Fix: supply a default and handle scope:

DAX

Копировать

Редактировать

```
Selected Metric Value =
VAR m = SELECTEDVALUE ( Metric[Name], "SUM" )
RETURN
```

```
SWITCH ( m,
   "AVERAGE", AVERAGE(Sales[Amount]),
   "COUNT",   COUNT(Sales[Amount]),
   [Total Sales]       -- default for totals/ambiguous context
)
```

For complex matrices, use ISINSCOPE()/HASONEVALUE() to branch logic, or a Calculation Group.

15) Simulate a “reset filters” button with ALL

DAX

Копировать

Редактировать

```
Total Sales (Reset) =
CALCULATE ( [Total Sales], ALL ( Sales ) )
-- Equivalent: CALCULATE([Total Sales], REMOVEFILTERS(Sales))
```