

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

✓ Returns a **table** containing only rows from **Sales** where **Amount > 1000**.

✓ 2. Write a measure **High Sales** that sums **Amount** where **Amount > 1000** using **FILTER**.

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

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

ALL(Sales)	ALLEXCEPT(Sales, Sales[Region])
Removes all filters on Sales table Shows total sales regardless of any filter	Removes all filters except Region Keeps Region filter context while removing others

✓ 4. Use **SWITCH** to categorize **Amount**:

- "Medium" if **500–1000**
- "High" if **>1000**

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

✓ 5. What is the purpose of **ALLSELECTED**?

✓ **ALLSELECTED** removes filters **except those explicitly applied by user selections (e.g., slicers)**.

Useful in visuals to calculate **totals respecting slicer filters** but ignoring visual-level or row context filters.

✓ **6. Measure Regional Sales % showing each sale's contribution to its region's total (use ALLEXCEPT).**

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

✓ **7. Create a dynamic measure using SWITCH to toggle between SUM, AVERAGE, and COUNT of Amount.**

Assuming a **MeasureSelector** table with values: "SUM", "AVERAGE", "COUNT":

```
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Dynamic Amount Measure =
SWITCH(
    SELECTEDVALUE(MeasureSelector[Measure]),
    "SUM", SUM(Sales[Amount]),
    "AVERAGE", AVERAGE(Sales[Amount]),
    "COUNT", COUNT(Sales[Amount])
)
```

✓ **8. Use FILTER inside CALCULATE to exclude "Furniture" sales.**

```
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Exclude Furniture Sales =
CALCULATE(
    SUM(Sales[Amount]),
    FILTER(
        Products,
        Products[Category] <> "Furniture"
    )
)
```

✓ Ensure Sales table is related to Products table.

✓ **9. Why might ALLSELECTED behave unexpectedly in a pivot table?**

Because **ALLSELECTED** includes slicer selections and outer visual filters.

If nested in complex visuals, it may include filters not intended, leading to unexpected totals.

✓ 10. Measure to calculate total sales ignoring filters from region.

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Total Sales Ignore Region =
CALCULATE(
 SUM(Sales[Amount]),
 ALL(Sales[Region])
)

✓ 11. Optimize this measure (replace FILTER with boolean filter).

Original:

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

✓ Optimized:

DAX
КопироватьРедактировать
High Sales =
CALCULATE(
 SUM(Sales[Amount]),
 Sales[Amount] > 1000
)

Boolean filters are faster than FILTER expressions when applicable.

✓ 12. Measure Top 2 Products using TOPN and FILTER.

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Top 2 Products Sales =
CALCULATE(
 SUM(Sales[Amount]),
 TOPN(
 2,
 SUMMARIZE(Sales, Sales[ProductID], "TotalSales", SUM(Sales[Amount])),
 [TotalSales], DESC
)
)

✓ This sums Amount for **top 2 products by sales**.

✓ 13. Use ALLSELECTED with no parameters to respect slicers but ignore visual-level filters.

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Total Sales AllSelected =

```
CALCULATE(  
    SUM(Sales[Amount]),  
    ALLSELECTED()  
)
```

✓ 14. Debug: SWITCH measure returns incorrect values in matrix visual. Why?

Likely cause:

- **SWITCH** uses **SELECTEDVALUE** that returns BLANK if multiple values exist in matrix rows or columns.

✓ **Solution:** Ensure your selector column has **single value context** or handle multiple selections with fallback logic.

✓ 15. Simulate a "reset filters" button using ALL in a measure.

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Reset Filters Sales =

```
CALCULATE(  
    SUM(Sales[Amount]),  
    ALL(Sales)  
)
```