Beginner DAX Measures and Verified Baselines

Eight measures, consistent table names, clear denominator conventions and explicit Power BI verification limits.

Create these expressions one by one using Modeling > New measure. The exact semantic model table names must match the imported four-table package. These are documented DAX expressions; their expected mathematics was independently verified but they were NOT executed in a DAX runtime in this session.

Total Sessions

```
Total Sessions =
COUNTROWS(FactSessions)
```

Expected baseline: 240; accepted fact rows. Slicers should change the result through model filter context.

Completed Sessions

```
Completed Sessions =
CALCULATE(
    [Total Sessions],
    FactSessions[Completed] = 1
)
```

Expected baseline: 152. Slicers should change the result through model filter context.

Completion Rate

```
Completion Rate =
DIVIDE([Completed Sessions], [Total Sessions])
```

Expected baseline: 152/240=63.33%. Slicers should change the result through model filter context.

Total Study Minutes

```
Total Study Minutes =
SUM(FactSessions[MinutesSpent])
```

Expected baseline: 13,615 measured minutes. Slicers should change the result through model filter context.

Sessions With Duration

```
Sessions With Duration =
COUNT(FactSessions[MinutesSpent])
```

Expected baseline: 233 numeric durations, including valid zeros. Slicers should change the result through model filter context.

Average Session Duration

```
Average Session Duration =
DIVIDE([Total Study Minutes], [Sessions With Duration])
```

Expected baseline: 13,615/233=58.43. Slicers should change the result through model filter context.

Active Learners

```
Active Learners =
DISTINCTCOUNT(FactSessions[LearnerCode])
```

Expected baseline: 40. Slicers should change the result through model filter context.

Resources Accessed

```
Resources Accessed =
DISTINCTCOUNT(FactSessions[ResourceID])
```

Expected baseline: 36. Slicers should change the result through model filter context.

Imported date table

Import DimDate.csv with 365 continuous 2025 date rows. Use a one-to-many relationship DimDate[Date] -> FactSessions[SessionDate] and sort MonthName by MonthNumber. If building a new calculated table with CALENDAR(), do not retain two conflicting date relationships.

Blank values and zero-denominator behavior

Seven accepted sessions have missing MinutesSpent. COUNT(MinutesSpent) excludes blanks, not numeric zeros. A filter with no fact rows can make DIVIDE return BLANK: consider informative labels rather than automatically inventing a rate of zero.

Verification boundaries

Microsoft documentation supports the DAX syntax and mathematical interpretation. Confirm real formula execution and actual filter behavior in Power BI Desktop before calling the report verified.