# P04 Sample Solution Report – Pivot Tables

## Overview

This report summarises the methodology and key findings for the practical. All computations are based on the provided synthetic dataset.

### Dataset Snapshot

Date Product Region Sales Quantity  
2025-01-01 Phone West 31545.19 3.0  
 NaT Accessory East 60022.20 1.0  
2025-01-03 Tablet East 55725.84 19.0  
 NaT Phone West 44842.87 11.0  
2025-01-05 Laptop North 48935.16 16.0

### Summary Statistics

* Sales\_mean: 50006.95
* Sales\_median: 50869.32
* Sales\_mode: 31545.19
* Sales\_var: 130207078.35
* Sales\_std: 11410.83
* Quantity\_mean: 10.21
* Quantity\_median: 11.00
* Quantity\_mode: 7.00
* Quantity\_var: 30.84
* Quantity\_std: 5.55

### Correlation Matrix

Sales Quantity  
Sales 1.00000 0.08301  
Quantity 0.08301 1.00000

### Interpretation

The pivot table reveals which combinations of region and product drive sales. Grouping by month shows seasonal patterns, while the calculated field highlights average sales per transaction.

### Validation Tips

After building the pivot table, cross‑check totals with manual calculations or simple filters to ensure accuracy.