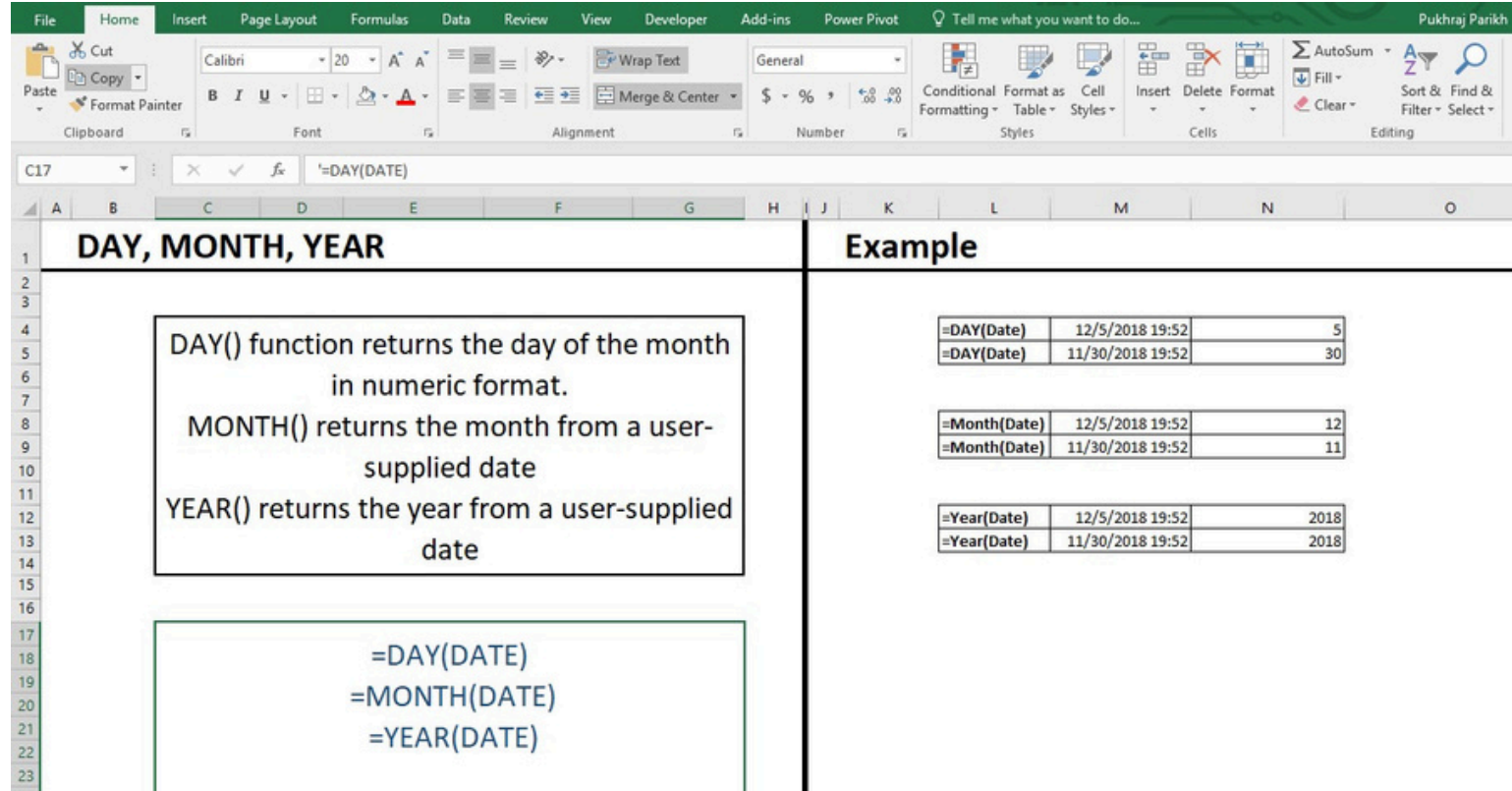




Microsoft Excel
Masterclass :
Complete & Concise

Formulas

- ☐ Mathematical
- ☐ Textual
- ☐ Logical
- ☐ Date & Time



Lookup Formulas

- ☐ VLookup
- ☐ HLookup
- ☐ Index
- ☐ Match

The screenshot shows the Microsoft Excel interface with the MATCH function explained and an example table.

MATCH

Match function looks up a value in an array, and returns the position of the value within the array

`=MATCH(lookup_value, lookup_array, [match_type])`

Example

| | 1 | 2 | 3 | |
|-------------|-------|---------|---------|-------|
| Students | Maths | Science | English | Maxir |
| 1 Student 1 | 99 | 83 | 85 | |
| 2 Student 2 | 65 | 79 | 43 | |
| 3 Student 3 | 82 | 80 | 84 | |
| 4 Student 4 | 100 | 99 | 82 | |
| 5 Student 5 | 45 | 60 | 30 | |
| MAX | 100 | 99 | 85 | |

Who Scored the maximum number

| | Maths | Science | English |
|----------------|-------|---------|---------|
| Student Number | 4 | 4 | 1 |

In which subject Student 1, 2 and 3 scored their maximum marks

| | Subject Number |
|-----------|----------------|
| Student 1 | 1 |
| Student 2 | 2 |

Data Tools

- Sorting
- Filtering
- Data Importing
- Data Validation

The screenshot displays the Microsoft Excel interface. The 'Filters' task pane is open on the left, showing a list of filter types: Text Filters, Number filters, Custom filter, and Short cut keys. The 'Example' pane on the right shows a table with columns: Students, Maths, Science, English, Maths Grad, Science Grad, and English Grad. The 'Maths' column is selected, and a filter dropdown is visible. The filter settings show 'Sort A to Z' and 'Sort by Color'. The 'Text Filters' section is expanded, showing a search box and a list of values: (Select All), A, and B. The 'OK' button is highlighted.

| Students | Maths | Science | English | Maths Grad | Science Grad | English Grad |
|-----------|-------|---------|---------|------------|--------------|--------------|
| Student 1 | 99 | | | | B | A |
| Student 2 | 65 | | | | C | C |
| Student 3 | 85 | | | | B | B |
| Student 4 | 100 | | | | A | B |
| Student 5 | 45 | | | | B | C |

Formatting

- Data presentation
 - Conditional Formatting
- ## Formatting

| Students | Maths | Science | English | Music | History | Geography | Total | Percentage |
|------------|-------|---------|---------|-------|---------|-----------|-------|------------|
| Student 1 | 99 | 83 | 85 | 82 | 69 | 92 | 510 | 85% |
| Student 2 | 85 | 53 | 43 | 52 | 11 | 52 | 296 | 49% |
| Student 3 | 85 | 80 | 79 | 79 | 74 | 91 | 488 | 81% |
| Student 4 | 100 | 99 | 82 | 98 | 81 | 62 | 522 | 87% |
| Student 5 | 45 | 60 | 30 | 59 | 45 | 60 | 299 | 50% |
| Student 6 | 63 | 76 | 81 | 61 | 94 | 45 | 420 | 70% |
| Student 7 | 72 | 67 | 86 | 66 | 81 | 58 | 430 | 72% |
| Student 8 | 82 | 63 | 72 | 80 | 53 | 92 | 442 | 74% |
| Student 9 | 68 | 93 | 71 | 92 | 96 | 65 | 485 | 81% |
| Student 10 | 59 | 89 | 95 | 57 | 31 | 75 | 406 | 68% |
| Student 11 | 84 | 43 | 93 | 42 | 52 | 75 | 389 | 65% |
| Student 12 | 94 | 72 | 54 | 92 | 32 | 57 | 401 | 67% |
| Average | 78.0 | 73.2 | 72.6 | 71.7 | 59.9 | 68.7 | | |

Pivot Tables

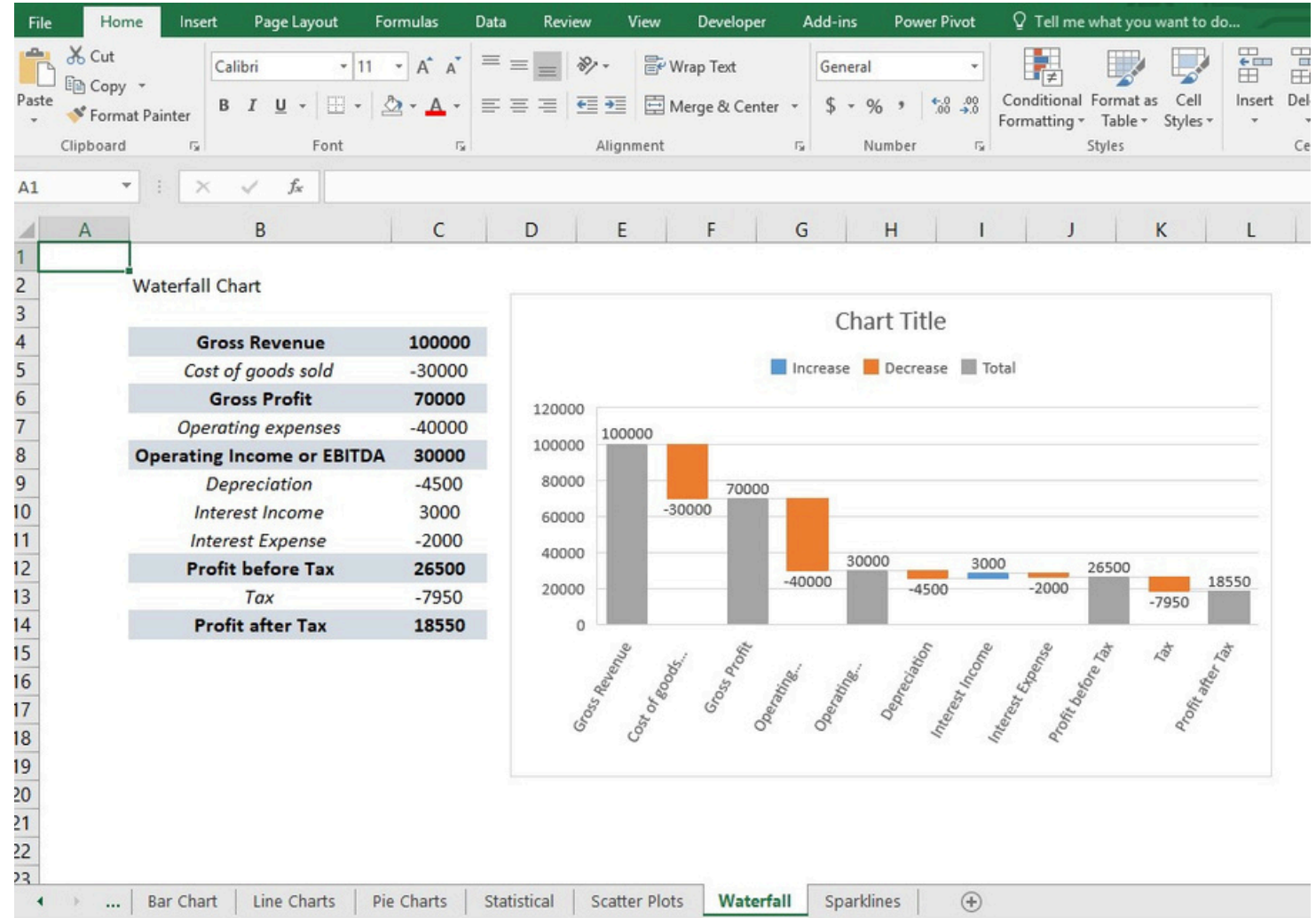
- ☐ Use Cases
- ☐ Filtering
- ☐ Slicing
- ☐ Grouping

The screenshot displays an Excel worksheet with a PivotTable summarizing sales data by region and date. The PivotTable is located in the range D4:O18. The 'Region' field is placed in the Filters area of the PivotTable Fields task pane, and the 'Date' field is in the Rows area. The 'Sum of Total Cost' is the calculated value field in the Values area. A data slicer for the 'Region' field is visible, showing four options: NE, NW, SE, and SW. The NW option is currently selected. The worksheet shows data for each month from January to December, with a Grand Total row at the bottom. The status bar at the bottom indicates 'Sheet6' and 'Raw data'.

| Region | Sum of Total Cost |
|-------------|-------------------|
| NE | 37446.15 |
| NW | 60922.54 |
| SE | 19107.15 |
| SW | 18698.38 |
| Grand Total | 136174.22 |

Charts

- ☐ Bar Charts
- ☐ Line Charts
- ☐ Waterfall Charts
- ☐ Other charts



Shortcuts

The screenshot shows the Microsoft Excel interface with the 'Home' tab selected. The worksheet is titled 'SHORTCUTS' and contains a table of student grades. A list of shortcuts is provided on the left side of the worksheet.

Navigation

- Move from cell to cell
- Go to end of contiguous range
- Move one screen up
- Move one screen down
- Move one screen left
- Move one screen right
- Go to cell A1
- Select a cell range
- Highlight a contiguous range
- Select all
- Move to next worksheet
- Move to previous worksheet

Editing

- Copy Paste
- Cut Paste
- Undo
- Paste special

File

- Save
- Print
- More

Example

| Students | Maths | Science | English | Maths Grade | Science Grade |
|-----------|-------|---------|---------|-------------|---------------|
| Student 1 | 99 | 83 | 85 | A | B |
| Student 2 | 65 | 53 | 43 | B | C |
| Student 3 | 85 | 80 | 79 | A | B |
| Student 4 | 100 | 99 | 82 | A | A |
| Student 5 | 45 | 60 | 30 | B | B |

| Students | Maths | Science | English | Distinction | Fail |
|-----------|-------|---------|---------|-------------------------|------------------------|
| Student 1 | 99 | 83 | 85 | Passed with Distinction | Promoted to next class |
| Student 2 | 65 | 53 | 43 | | Promoted to next class |
| Student 3 | 85 | 80 | 79 | Passed with Distinction | Promoted to next class |
| Student 4 | 85 | 99 | 82 | Passed with Distinction | Promoted to next class |
| Student 5 | 45 | 60 | 30 | | Failed |

Shortcuts

Ctrl + Shift + →

Start-Tech ACADEMY

Average: 78.8 Count: 10 Sum: 394

Advance Analytics

- ☐ Solver
- ☐ Regression
- ☐ Goal Seek

FileHomeInsertPage LayoutFormulasDataReviewViewDeveloperAdd-insPower PivotTell me what you want to do...

Cut

Copy

Format Painter

Clipboard

Calibri

11

A

A

B

I

U

Font

Alignment

Wrap Text

Merge & Center

Number

General

Conditional Formatting

Format as Table

Cell Styles

Insert

Delete

Format

Cells

18

X

✓

fx

4800

| | | | | | | | | | | | | | | | | | | | |
|----|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| 1 | | | | | | | | | | | | | | | | | | | |
| 2 | | | | | | | | | | | | | | | | | | | |
| 3 | | | | | | | | | | | | | | | | | | | |
| 4 | | | | | | | | | | | | | | | | | | | |
| 5 | | | | | | | | | | | | | | | | | | | |
| 6 | | | | | | | | | | | | | | | | | | | |
| 7 | | | | | | | | | | | | | | | | | | | |
| 8 | | | | | | | | | | | | | | | | | | | |
| 9 | | | | | | | | | | | | | | | | | | | |
| 10 | | | | | | | | | | | | | | | | | | | |
| 11 | | | | | | | | | | | | | | | | | | | |
| 12 | | | | | | | | | | | | | | | | | | | |
| 13 | | | | | | | | | | | | | | | | | | | |
| 14 | | | | | | | | | | | | | | | | | | | |
| 15 | | | | | | | | | | | | | | | | | | | |
| 16 | | | | | | | | | | | | | | | | | | | |
| 17 | | | | | | | | | | | | | | | | | | | |
| 18 | | | | | | | | | | | | | | | | | | | |
| 19 | | | | | | | | | | | | | | | | | | | |
| 20 | | | | | | | | | | | | | | | | | | | |
| 21 | | | | | | | | | | | | | | | | | | | |
| 22 | | | | | | | | | | | | | | | | | | | |
| 23 | | | | | | | | | | | | | | | | | | | |
| 24 | | | | | | | | | | | | | | | | | | | |

Scenario Summary

Current Values:10 percent30 percent50 percent70 percent90 percent

Changing Cells:

\$H\$9

75%

10%

30%

50%

70%

90%

Result Cells:

\$H\$14

4500

3200

3600

4000

4400

4800

Notes: Current Values column represents values of changing cells at time Scenario Summary Report was created. Changing cells for each scenario are highlighted in gray.

Scenario SummaryScenario Summary 2What-ifSolverSheet10Regression

Macros

- Recording Macros
- Adding buttons

The screenshot shows the Microsoft Excel interface. The ribbon is set to 'Home'. In the 'Cells' group, the 'Insert' button is highlighted. Below the ribbon, in cell A27, there is a red button labeled 'Button test'. To the right of the button is a table with student data.

| Students | Maths | Science | English | Maths Grade | Science Grade |
|-----------|-------|---------|---------|-------------|---------------|
| Student 1 | 99 | 83 | 85 | A | B |
| Student 2 | 65 | 53 | 43 | B | C |
| Student 3 | 85 | 80 | 79 | A | B |
| Student 4 | 100 | 99 | 82 | A | A |
| Student 5 | 45 | 60 | 30 | B | B |
| Student 6 | 100 | 99 | 82 | A | A |
| Student 7 | 45 | 60 | 30 | B | B |

Exercise

Bonus Lectures

- ☐ Overlay graphs
- ☐ Infographics
- ☐ Useful Add-ins
- ☐ Others

