## BASIC Calculation - Mix Formula

## Ms-Excel

## Formula-Exercise-1 (Click here for Solution)

Calculate Total Price, Discount Amount and Net Amount of following items.

| Purchase Item - List |  |  |  |  |  |  |  |
| :--- | ---: | ---: | :--- | :--- | :--- | :--- | :---: |
| Item Name | Qty | Price | Total Price | Discount\% | Discount <br> Amount | Net <br> Amount |  |
| Chair | 2 | 400 | $=$ Product(B3:C3) | $2 \%$ | =D3*E3 | =D3-F3 |  |
| Table | 2 | 600 | $=\operatorname{Product(B4:C4)~}$ | $2 \%$ | =D4*E4 | =D4-F4 |  |
| Almira | 3 | 2000 | $=\operatorname{Product(B5:C5)~}$ | $3 \%$ | =D5*E5 | =D5-F5 |  |
| Sofa | 4 | 5000 | $=\operatorname{Product(B6:C6)~}$ | $3 \%$ | =D6*E6 | =D6-F6 |  |

> After Apply formula on sheet, value show as below image.

|  | A | B | C | D | E | F | G |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | Purchase Item - List |  |  |  |  |  |  |
| 2 | Item Name | Qty | Price | Total Price | Discount\% | Discount Amount | Net Amount |
| 3 | Chair | 2 | 400 | 800 | 2\% | 16 | 784 |
| 4 | Table | 2 | 600 | 1200 | 2\% | 24 | 1176 |
| 5 | Almira | 3 | 2000 | 6000 | 3\% | 180 | 5820 |
| 6 | Sofa | 4 | 5000 | 20000 | 3\% | 600 | 19400 |

Formula-Exercise -2 (Click here for Solution)
Calculate 5 Students Total Marks, Average Marks and Division of following Students.

| DAV Public School - Class 11th |  |  |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | :--- | :--- | :--- | :---: |
| Student's <br> Name | Math's | English | Account | Economics | Total Marks | Average Marks | Division |  |
| Vikram | 56 | 56 | 45 | 76 | =SUM(B3:E3) | =AVERAGE(B3:E3) |  |  |
| Megha | 4 | 3 | 6 | 78 | =SUM(B4:E4) | =AVERAGE(B4:E4) |  |  |
| Lalit | 56 | 54 | 33 | 43 | =SUM(B5:E5) | =AVERAGE(B5:E5) |  |  |
| Rini | 34 | 5 | 4 | 67 | =SUM(B6:E6) | =AVERAGE(B6:E6) |  |  |
| Piyush | 99 | 89 | 78 | 79 | $=S U M(B 7: E 7)$ | =AVERAGE(B7:E7) |  |  |

## $>$ Division formula for vikram Student

=IF(G3>=60,"1st",IF(G3>=50,"2nd",IF(G3>=33,"3rd","fail")))

## same as apply for all other students

> After Apply formula on sheet, value show as below image.

| - | A | B | C | D | E | F | G | H |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | DAV Public School - Class 11th |  |  |  |  |  |  |  |
| 2 | Student's <br> Name | Maths | English | Account | Economics | Total <br> Marks | Average Marks | Division |
| 3 | Vikram | 56 | 56 | 45 | 76 | 233 | 58.25 | 2nd |
| 4 | Megha | 4 | 3 | 6 | 78 | 91 | 22.75 | fail |
| 5 | Lalit | 56 | 54 | 33 | 43 | 186 | 46.5 | 3rd |
| 6 | Rini | 34 | 5 | 4 | 67 | 110 | 27.5 | fail |
| 7 | Piyush | 99 | 89 | 78 | 79 | 345 | 86.25 | 1st |

Formula-Exercise -3(Click here for Solution)

| Name of Employee | 1 | Salary | Designation | Bonus |
| :---: | :---: | :---: | :---: | :---: |
| Sandeep | T | 18000 | Developer | 2000 |
| Raman |  | - $-1-22000$ | Typist | 5000 |
| Vinay |  | 9-125000 | Typist | 4000 |
| Arun |  | --45000 | Admin | 2300 |
| Hemant |  | 16000 | Typist | 5000 |
| Mayank |  | 80000 | Asst. Manager | 4000 |
| Rohit Rana |  | 95000 | Sen. Developer | 8000 |
| Total Salary/Bonus |  | =SUM(B2:B8) |  | =SUM(D2:D8) |
| Min Salary |  |  |  | =MIN(B2:B8) |
| Max Salary |  |  |  | =MAX(B2:B8) |
| Average Salary |  |  |  | =AVERAGE(B2:B8) |
| No. of Typist |  |  |  | =COUNTIF(C2:C8,"Typist") |
| No of Employee bonus equal or above 4000 |  |  |  | =COUNTIF(D2:D8,">=4000") |
| No.of Employee getting salary more than 25000 |  |  |  | =COUNTIF(B2:B8,">25000") |

- Apply formula as per show in above table.
- After apply formula final sheet show as below image


## Practice Exercise-1(Click here for Solution)

| Student <br> name | Math's | Eng | Account | Business | Economics | Total | Grade | Result |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :--- |
| Heena | 23 | 34 | 43 | 43 | 76 |  |  |  |
| Priya | 32 | 45 | 54 | 56 | 56 |  |  |  |
| vivek | 23 | 56 | 65 | 65 | 54 |  |  |  |
| Sonu | 34 | 54 | 76 | 65 | 43 |  |  |  |
| Ravi | 54 | 43 | 45 | 56 | 23 |  |  |  |
|  |  |  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |

- In G Column - Sum of All subject Marks show with appropriate formula
- In H column - Grade show According to following criteria.

A+ - if Total marks value is more than 450.
A - if Total marks value is more than 400.
B - if Total Marks value is more than 300.
C - if Total Marks value is more than 250
E - Below Total marks 250.
Example (Hint)- =if(H2>450,"A+",if(H2>400,"A"...................upto E grade

- In I column - Result show as Pass, fail or Compartment According to criteria and formula.
if Any One Subject marks below 33
if Any two Subject Marks below 33
if Any Three subject or more 3 Subject Below 33
if All subject Marks above 33


## Compartment

Compartment
Fail

Pass

- Apply formula in I Column for 2nd Row and same for other row (Change row no)
=|F(COUNTIF(B2:F2,">=33")=5,"Pass",IF(COUNTIF(B2:F2,">=33")>=3,"Co mpartment",IF(COUNTIF(B2:F2,">=33")<3,"Fail")))
> After Apply formula on sheet, value show as below image.

|  | A |  | B | C | D | F | G | H | I |
| :--- | :--- | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :--- | :--- |
| 1 | Student name | Math's | Eng | Account | Business | Economics | Total | Grade | Result |
| 2 | Heena | 5 | 89 | 5 | 88 | 6 | 193 | D | Fail |
| 3 | Priya | 32 | 45 | 54 | 56 | 56 | 243 | D | Compartment |
| 4 | vivek | 23 | 56 | 65 | 65 | 54 | 263 | C | Compartment |
| 5 | Sonu | 34 | 54 | 76 | 65 | 43 | 272 | C | Pass |
| 6 | Ravi | 54 | 43 | 45 | 56 | 23 | 221 | D | Compartment |

## Practice Exercise -2(Click here for Solution)

- Calculate Total Purchase / Sales and Profit of following Items.

|  | A | B | C | E | F | G | H |  |
| :---: | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1 | Product | Qty | Purchase Price | Discount | Total Amount | Sales Price | Total Amount | Profit/Loss |
| 2 | Item A | 5 | 200 | $2 \%$ |  | 250 |  |  |
| 3 | Item B | 5 | 150 | $2 \%$ |  | 180 |  |  |
| 4 | Item C | 10 | 90 | $3 \%$ |  | 110 |  |  |
| 5 | Item D | 10 | 150 | $3 \%$ |  | 130 |  |  |
| 6 | Total Purchase/Sales and Profit |  |  |  |  |  |  |  |

- Using Product formula calculate Purchase Price with QTY on Total Amount for Purchase
- Using Product formula calculate Sales Price with QTY on Total Amount for Sales
- Sales Amount - Purchase Amount for Calculate Profit/Loss
- on 6th Row calculate final Total Purchase (E6) Cell and sales (G6) Cell with Profit (H6) Cell.
- Below image show after the apply Appropriate formula on Above sheet Cell.

|  | A | B C | D | E | F | G | H |  |
| ---: | :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: |
| 1 | Product | Qty | Purchase Price | Discount | Total Amount | Sales Price | Total Amount | Profit/Loss |
| 2 | Item A | 5 | 200 | $2 \%$ | 980 | 250 | 1250 | 270 |
| 3 | Item B | 5 | 150 | $2 \%$ | 735 | 180 | 900 | 165 |
| 4 | Item C | 10 | 90 | $3 \%$ | 873 | 110 | 1100 | 227 |
| 5 | Item D | 10 | 150 | $3 \%$ | 1455 | 130 | 1300 | -155 |
| 6 | Total Purchase/Sales and Profit |  |  | 4043 |  | 4550 | 507 |  |

## Total Amount Purchase (Example-Formula) (Hint)

$=\operatorname{Product}(\mathrm{B} 2, \mathrm{C} 2)-\operatorname{Product}(\mathrm{B} 2, \mathrm{C} 2)^{*} \mathrm{D} 2$

## Practice Exercise-3(Click here for Solution)

- Using Appropriate formula find out the subject offered and scholarship provide to Student

| Student name | Grade | Father's Salary | Subject offer | Scholarship <br> Amount |
| :--- | :--- | :--- | :--- | :---: |
| Vivek | B | 15000 |  |  |
| Naveen | B+ | 22000 |  |  |
| Sonia | A | 9000 |  |  |
| Piyush | A+ | 25000 |  |  |
| Sandeep | C | 18000 |  |  |

- Scholarship offered 100\% of those student father's salary equal or above Rs 15,000 (Maximum Scholarship upto 16,000).
- Scholarship 50\% of those Student's father salary below 15,000. (Min Scholarship Rs 8,000)
- Subject Offered according to Grade following table.

| Grade | Subject Offered |
| :---: | :---: |
| A+ | Math's |
| A | Account |
| B+ | Economics |
| B | Business Study |
| C | Marketing |

## Formula for Subject offered - Example (Hint)

=if(B2="A","Business Study",if(B2="B","History"..... upto Grade C
Formula for Scholarship
$=i f(c 2>16000,16000, i f(c 2>15000, c 2 * 100 \%, \max (c 2 * 50 \%, 8000)))$

