Loan Sheet Calculation Formula (EMI)

Ms-Excel

Formula-Exercise -1(Click here for Solution)

> ➢ **Calculate EMI on Air conditioner Item up to 6 Month - Monthly Basis paid by XYZ**

Loan Amount   -   Rs 26,000

Rate of Interest   -   14.5% Annually

Loan	26000			
Rate	14.50%			
Month	6			
EMI	=PMT(B2/12,B3,-B1)			
Period	**Opening Balance**	**Interest**	**Installment**	**Closing Balance**
1	=B1	=B6*$B$2/12	=$B$4	=B6+C6-D6
2	=E6	=B7*$B$2/12	=$B$4	=B7+C7-D7
3	=E7	=B8*$B$2/12	=$B$4	=B8+C8-D8
4	=E8	=B9*$B$2/12	=$B$4	=B9+C9-D9
5	=E9	=B10*$B$2/12	=$B$4	=B10+C10-D10
6	=E10	=B11*$B$2/12	=$B$4	=B11+C11-D11

- If **EMI** calculate on Monthly Basic, we must divide Rate of interest by 12. For **Annually** calculation we only define Rate no need for divide by 12. For **Half yearly** calculation Rate of interest Divide by 2. For **Quarterly** EMI calculation Rate of interest divide by 4.
- We should apply - (minus) Sign with Loan Amount for show present value EMI in Positive Type.
- **PMT** is calculating EMI Monthly/ Yearly/ Quarterly or Daily as Per Rate, Month/Year, and loan Amount.
- **Last** year Closing balance is opening Balance for **Next** year.
- Interest rate same for Every Year we only calculate interest as per opening balance * with Rat of interest.
- Installment is same for each year as 1st Year.
- Closing balance is based on Opening Balance + Interest and we subtract EMI (installment) for Closing balance calculation.

- If **Currency** ($) show with EMI, change it with comma Style from Home Tab.

Formula-Exercise -2 (Click here for Solution)

➤ **Calculate EMI on Washing Machine Item Quarterly up to 6 EMI, paid by ABC Firm.**

Loan Amount	-	Rs 26,000
Rate of Interest	-	14.5% Annually

- *Note - Divide Rate of interest by 4*

Solution

Loan	26000
Rate	14.50%
Quarterly	6
EMI	4,899.43

Period	Opening Balance	Interest	Installment	Closing Balance
1	26000	942.5	4,899.43	22,043.07
2	22,043.07	799.0614106	4,899.43	17,942.71
3	17,942.71	650.4231723	4,899.43	13,693.70
4	13,693.70	496.3967979	4,899.43	9,290.67
5	9,290.67	336.7869674	4,899.43	4,728.04
6	4,728.04	171.3912805	4,899.43	(0.00)

Formula-Exercise -3(Click here for Solution)

➤ **Calculate EMI on Laptop i7 Hp Item Half Yearly up to 6 EMI for 3 Year, paid by JK Firm.**

Loan Amount	-	Rs 26,000
Rate of Interest	-	14.5% Annually

- *Note - Divide Rate of interest by 2*

Loan	26000
Rate	14.50%
Half Yearly	6
EMI	5,496.86

Period	Opening Balance	Interest	Installment	Closing Balance
1	26,000.00	1885	5,496.86	22,388.14
2	22,388.14	1623.14	5,496.86	18,514.42
3	18,514.42	1342.296	5,496.86	14,359.86
4	14,359.86	1041.09	5,496.86	9,904.09

| 5 | 9,904.09 | 718.0465 | 5,496.86 | 5,125.28 |
| 6 | 5,125.28 | 371.5825 | 5,496.86 | 0.00 |

Formula-Exercise -4(Click here for Solution)

> ➤ **Calculate EMI on Home Loan Yearly Basis EMI for 6 Year, paid by AK Sharma**

Loan Amount   -   Rs 26,00,000

Rate of Interest   -   14.5% Annually

- *Note - no Need to divide Rate of interest*

Loan	2600000			
Rate	14.50%			
Yearly	6			
EMI	677,788.56			
Period	**Opening Balance**	**Interest**	**Installment**	**Closing Balance**
1	2,600,000.00	377000	677,788.56	2,299,211.44
2	2,299,211.44	333385.6588	677,788.56	1,954,808.54
3	1,954,808.54	283447.2382	677,788.56	1,560,467.22
4	1,560,467.22	226267.7466	677,788.56	1,108,946.40
5	1,108,946.40	160797.2287	677,788.56	591,955.07
6	591,955.07	85833.48572	677,788.56	0.00

Practice-Exercise -1 (Click here for Solution)

- Calculate Loan EMI (Half-Yearly Basis) on *Sheet 1* for **6 Year (Total 12 EMI)**
- Calculate Loan EMI (Quarterly Basis) on *Sheet 2* for **3 Year. (Total 12 EMI)**

Loan Amount   :   **20 Lacs**

Rate of Interest   :   **12.89%**

Practice-Exercise -2 (Click here for Solution)

- Calculate Loan EMI (Yearly Basis) on *Sheet 1* for **12 Year (Total 12 EMI)**
- Calculate Loan EMI (Daily Basis) on *Sheet 2* for **60 Days. (Total 60 EMI)**

Loan Amount   :   **10 Lacs**

Rate of Interest   :   **13.66%**