

## Explanation of “Rule of 78” for Personal Tax Loan

Interest for the total loan amount will normally be calculated based on a monthly flat rate for Personal Tax Loan. The borrower will repay the loan monthly with a fixed amount according to the interest rate, tenor and repayment amount agreed with the Bank. The “Rule of 78” is the method most banks use to break down the principal and interest in the monthly repayment of an instalment loan. Under this rule, the proportion of interest in the monthly instalment decreased over the course of loan period. Based on the “Rule of 78”, the monthly interest is calculated as below :

$$= \text{Interest for full term} \times \frac{\text{Remaining loan tenor}}{\text{Total loan tenor (For 12 monthly payments, it will be } 12+11+\dots+2+1=78)}$$

The total interest portions for different loan tenors are illustrated as below:

Loan Tenor (months)	Interest Portion
12	78 (12 + 11 + 10 + ... + 1)
24	300 (24 + 23 + 22 + ... + 1)
36	666 (36 + 35 + 34 + ... + 1)
48	1,176 (48 + 47 + 46 + ... + 1)
60	1,830 (60 + 59 + 58 + ... + 1)

If a loan is to be repaid over 12 months, the total interest will be divided into 78 portions (12 + 11 + 10 + ... + 1 = 78). The proportion of interest for first month is 12/78, for second month is 11/78 and so on until twelfth month. The proportion of interest for the twelfth month is 1/78.

### Example:

Assume loan amount is HK\$60,000 for a tenor of 24 months & interest rate 0.09% per month flat.

Total Interest Expenses	Monthly Instalment Amount
Loan principal X Monthly flat rate X Tenor (months) = HK\$60,000 x 0.09% x 24months = HK\$1,296	(Loan principal + Total interest expenses) / Tenor (months) = (HK\$60,000 + HK\$1,296) / 24months = HK\$2,554

Below is the repayment schedule for the first 3 and last 3 instalments of the said example:

Instalment Term	Interest	Principal	Outstanding Balance
Term 1	103.68	2,450.32	57,549.68
Term 2	99.36	2,454.64	55,095.04
Term 3	95.04	2,458.96	52,636.08
<b>Last 3 Instalments</b>			
Term 22	12.96	2,541.04	5,095.04
Term 23	8.64	2,545.36	2,549.68
Term 24	4.32	2,549.68	0.00
<b>Total</b>	<b>1,296</b>	<b>60,000</b>	

### ✓ Do customer save interest expenses by making fully settlement of instalment loan?

Refer to the above example, if customer repay the monthly instalment HK\$2,554 as scheduled and applies for fully settlement on the below designated instalment term, the outstanding principal amount of the loan, interest accrued up to next due date and early repayment fee (1.5% of the outstanding principal amount of the loan) will be charged by the Bank.

- If customer applies for fully settlement on or before Instalment Term 6, the early repayment fee is less than the unpaid interest, customer will not loss;
- If customer applies for fully settlement on or after Instalment Term 7, although the amount of unpaid interest saved, it is not enough to cover the early repayment fee that involved, customer will loss.

Instalment Term	Outstanding Balance	Interest	Early Repayment Fee	Total Settlement Amount	Interest Paid	Outstanding Interest
Term 5	50,172.80	86.40	752.59	51,011.79	388.80	820.80
Term 6	47,705.20	82.08	715.58	48,502.86	475.20	738.72
Term 7	45,233.28	77.76	678.50	45,989.54	557.28	660.96
Term 8	42,757.04	73.44	641.36	43,471.84	635.04	587.52

The example above is for reference only and all amounts are rounded to 2 decimal places.