## 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 :
$=$ Interest for full term $X \quad \frac{\text { Remaining loan tenor }}{\text { Total loan tenor (For } 12 \text { monthly payments, it will be 12+11+...+2+1=78) }}$
The total interest portions for different loan tenors are illustrated as below:

| Loan Tenor <br> (months) | Interest Portion |
| :--- | :--- |
| $\mathbf{1 2}$ | $78(12+11+10+\ldots+1)$ |
| $\mathbf{2 4}$ | $300(24+23+22+\ldots+1)$ |
| $\mathbf{3 6}$ | $666(36+35+34+\ldots+1)$ |
| $\mathbf{4 8}$ | $1,176(48+47+46+\ldots+1)$ |
| 60 | $1,830(60+59+58+\ldots+1)$ |

If a loan is to be repaid over 12 months, the total interest will be divided into 78 portions $(12+11+10+\ldots \ldots+1=78)$. 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) <br> $=H K \$ 60,000 \times 0.09 \% \times 24 m o n t h s ~$ <br> $=H K \$ 1,296$ | (Loan principal + Total interest expenses) /Tenor (months) <br> $=(H K \$ 60,000+$ HK $\$ 1,296) / 24 m o n t h s$ <br> $=H K \$ 2,554$ |

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

| Instalment Term | Interest | Principal | Outstanding <br> 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 | $2,458.96$ | $52,636.08$ |
| Last 3 Instalments | 12.96 | $2,541.04$ | $5,095.04$ |
| Term 22 | 8.64 | $2,545.36$ | $2,549.68$ |
| Term 23 | 4.32 | $2,549.68$ | 0.00 |
| Term 24 | 1,296 | 60,000 |  |
| Total |  |  |  |

## $\checkmark$ 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 accured 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 <br> Term | Outstanding <br> Balance | Interest | Early <br> RepaymentFee | SettlementAmount | Tnterest <br> Paid | Outstanding <br> 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.

