## RULE OF 78s GUIDELINES

## These guidelines below are designed to assist lenders to properly utilize the rule of 78s to calculate refunds or credits of the unearned portion of pre-computed interest charged.

The Rule of 78s is commonly - even widely -- used but is understood by very few people. It is a method of refunding on consumer transactions where the borrower prepays the account. It is not the only refunding method that is available under the law.

The Rule of 78s is also known as the sum of the digits. In fact, the 78 is, itself, a sum of the digits of the months in a year: 1 plus 2 plus 3 plus 4 , etc., to 12, equals 78 . Under the rule, each month in the contract is assigned a value which is exactly the reverse of its occurrence in the contract. Hence, the 1st month of a 12 month contract gets the value of 12 over 78 , the second month 11 over 78 , etc., until the 12th month gets a value of $1 / 78$. As the months elapse, the interest is earned by the lender equal to the total value of the expired months. For example, prepaying after 2 months would result in the lender being able to keep 23/78 or approximately 29.5 percent of the finance charges.

For another example, if the borrower prepays after 6 months, the lender would have earned 57/78s or approximately 73 percent of the finance charges.

NOTE: This is not as unfair as it seems. Even with a simple interest refunding, the borrower would not get a 50 percent interest rebate for having prepaid after half the term for the simple reason that you have more money borrowed early in the contract than at the end. The Rule of 78s will cost more upon prepayment but not as disproportionately more as it might seem.

Of course, most consumer credit contracts are longer than 12 months now and the sum of the digits is not confined to a simple 12 month contract. For example, a 24 month contract would have sum of the digits and, therefore, a denominator of 300 as a sum of the digits 1 through 24 is 300 . A 36 month contract would have a sum of the digits of 666 with the 1st month getting its value of $36 / 666$, the 2nd month getting a value of $35 / 666$, etc.

Adding a series of numbers representing the months in a contract can be arduous. A formula for getting the denominator very quickly is:

## $\mathrm{N} / 2 \times(\mathrm{N}+1)$ where N equals the number of payments.

A 48 month loan would be $48 / 2 \times(48-I-1)$ or 1,176 .
NOTE: If a contract is paid out to the full term, the refunding method is of no consequence. The Rule of 78 s does not have any effect on the earnings of a contract which is paid in full on time. Only prepayment will have the effect of the Rule of 78s raising the cost of the credit.

Under the law, a contract with a term of greater than 61 months cannot apply the Rule of 78 s.

From the following chart, we can see the percentage difference of the cost of a loan between a simple interest refund and the Rule of 78s.

| \$5,000.00 loan for 36 months @ 17.5\%Interest $\$ 1,462.36$ |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Months Elapsed | Simple Interest |  | Rule of 78s |  | Difference |
|  | \% | Refund | \% | Refund | Amount |
| 1 | 95.01 | \$1,389.39 | 94.59 | \$1,383.25 | \$6.14 |
| 2 | 90.13 | \$1,318.03 | 89.34 | \$1,306.47 | \$11.55 |
| 3 | 85.36 | \$1,248.27 | 84.23 | \$1,231.75 | \$16.52 |
| 4 | 80.70 | \$1,180.12 | 79.28 | \$1,159.36 | \$20.77 |
| 5 | 76.15 | \$1,113.59 | 74.47 | \$1,089.02 | \$24.57 |
| 6 | 71.71 | \$1,048.66 | 69.82 | \$1,021.02 | \$27.64 |
| 7 | 67.38 | \$985.34 | 65.32 | \$955.21 | \$30.12 |
| 8 | 63.18 | \$923.92 | 60.96 | \$891.45 | \$32.46 |
| 9 | 59.08 | \$863.96 | 56.76 | \$830.04 | \$33.93 |
| 10 | 55.11 | \$805.91 | 52.70 | \$770.66 | \$35.24 |
| 11 | 51.26 | \$749.61 | 48.80 | \$713.63 | \$35.97 |
| 12 | 47.53 | \$695.06 | 45.05 | \$658.79 | \$36.27 |
| 13 | 43.93 | \$642.41 | 41.44 | \$606.00 | \$36.41 |
| 14 | 40.45 | \$591.52 | 37.99 | \$555.55 | \$35.97 |
| 15 | 37.11 | \$542.68 | 34.68 | \$507.15 | \$35.54 |
| 16 | 33.89 | \$495.59 | 31.53 | \$461.08 | \$34.51 |
| 17 | 30.80 | \$450.41 | 28.53 | \$417.21 | \$33.20 |
| 18 | 27.85 | \$407.27 | 25.68 | \$375.53 | \$31.73 |
| 19 | 25.03 | \$366.03 | 22.97 | \$335.90 | \$30.12 |
| 20 | 22.36 | \$326.98 | 20.42 | \$298.61 | \$28.37 |
| 21 | 19.82 | \$289.84 | 18.02 | \$263.52 | \$26.32 |
| 22 | 17.42 | \$254.74 | 15.77 | \$230.61 | \$24.13 |
| 23 | 15.17 | \$221.84 | 13.66 | \$199.76 | \$22.08 |
| 24 | 13.06 | \$190.98 | 11.71 | \$171.24 | \$19.74 |
| 25 | 11.11 | \$162.47 | 9.91 | \$144.92 | \$17.55 |
| 26 | 9.30 | \$136.00 | 8.26 | \$120.79 | \$15.21 |
| 27 | 7.64 | \$111.72 | 6.76 | \$98.86 | \$12.87 |
| 28 | 6.14 | \$89.79 | 5.41 | \$79.11 | \$10.68 |
| 29 | 4.80 | \$70.19 | 4.20 | \$61.42 | \$8.77 |
| 30 | 3.62 | \$52.94 | 3.15 | \$46.06 | \$6.87 |
| 31 | 2.60 | \$38.02 | 2.25 | \$32.90 | \$5.12 |
| 32 | 1.74 | \$25.45 | 1.50 | \$21.94 | \$3.51 |
| 33 | 1.05 | \$15.35 | 0.90 | \$13.16 | \$2.19 |
| 34 | 0.53 | \$7.75 | 0.45 | \$6.58 | \$1.17 |
| 35 | 0.18 | \$2.63 | 0.15 | \$2.19 | \$0.44 |
| 36 | 0.00 | \$0.00 | 0.00 | \$0.00 | \$0.00 |

## Some observations:

- No refunding method makes any difference if the account is paid to maturity on schedule.
- Under all refunding methods, more interest is earned at the beginning of the contract than at the end because more money is owed during that period in the contract.
- The law requires that you be advised the refunding method and, generally speaking, the simple interest method or actuarial method will be better for the consumer if there is going to be prepayment.
- With a Rule of 78s contract, making payments early will not reduce the total interest owed; paying the entire loan early will save some interest.
- When deciding whether to prepay an account, consider the potential rebate of credit insurance as well as interest.
- A borrower is almost always better off with a refunding method other than the Rule of 78s.

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FINANCIAL INSTITUTIONS DIVISION
P.O. Box 25101, 2550 Cerrillos Rd, Santa Fe, NM 87504

Phone: (505) 476-4885; Fax: (505) 476-4670; www.rld.nm.gov/financial-institutions/

