of depreciation, i.e., the group, classified, or composite rate used for the entire account. In the case of group accounts, i.e., accounts containing assets which are similar in kind and which have approximately the same estimated useful lives, the group rate is determined from the average of the useful lives of the assets. In the case of classified or composite accounts, the classified or composite rate is generally computed by determining the amount of one year's depreciation for each item or each group of similar items, and by dividing the total depreciation thus obtained by the total cost or other basis of the assets. The average rate so obtained is to be used as long as subsequent additions, retirements, or replacements do not substantially alter the relative proportions of different types of assets in the account. An example of the computation of a classified or composite rate follows:

| Cost or other basis | Estimated useful <br> life (years) | Annual deprecia- <br> tion |
| ---: | ---: | ---: |
| $\$ 10,000$ | 5 | $\$ 2,000$ |
| 10,000 | 15 | 667 |
| 20,000 |  | 2,667 |

Average rate is 13.33 percent ( $\$ 2,667 \div \$ 20,000$ ) unadjusted for salvage. Assuming the estimated salvage value is 10 percent of the cost
or other basis, the rate adjusted for salvage will be 13.33 percent minus 10 percent of 13.33 percent $(13.33 \%-1.33 \%)$, or 12 percent.
Example (3). The use of the straight line method for group, classified, or composite accounts is illustrated by the following example: A taxpayer filing his returns on a calendar year basis maintains an asset account for which a group rate of 20 percent has been determined, before adjustment for salvage. Estimated salvage is determined to be $62 / 3$ percent, resulting in an adjusted rate of 18.67 percent. During the years illustrated, the initial investment, additions, retirements, and salvage recoveries, which were determined not to change the composition of the group sufficiently to require a change in rate, were assumed to have been made as follows:
1954-Initial investment of \$12,000.
1957-Retirement $\$ 2,000$, salvage realized \$200.
1958-Retirement \$2,000, salvage realized \$200.
1959-Retirement $\$ 4,000$, salvage realized \$400.
1959-Additions \$10,000.
1960-Retirement $\$ 2,000$, no salvage realized.
1961-Retirement $\$ 2,000$, no salvage realized.

Depreciable Asset Account and Depreciation Computation on Average Balances

|  | Year | Asset balance Jan. 1 | Current additions | Current retirements | Asset balance Dec. 31 | Average balance | Rate (percent) | Allowable de-preciation |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1954 |  |  | \$12,000 | $\ldots$ | \$12,000 | \$6,000 | 18.67 | \$1,120 |
| 1955 | ............................... | \$12,000 |  | $\ldots$ | 12,000 | 12,000 | 18.67 | 2,240 |
| 1956 | ................................ | 12,000 | …......... |  | 12,000 | 12,000 | 18.67 | 2,240 |
| 1957 | ............................... | 12,000 | ..... | \$2,000 | 10,000 | 11,000 | 18.67 | 2,054 |
| 1958 |  | 10,000 |  | 2,000 | 8,000 | 9,000 | 18.67 | 1,680 |
| 1959 | ..................................... | 8,000 | 10,000 | 4,000 | 14,000 | 11,000 | 18.67 | 2,054 |
| 1960 |  | 14,000 | - | 2,000 | 12,000 | 13,000 | 18.67 | 2,427 |
| 1961 |  | 12,000 |  | 2,000 | 10,000 | 11,000 | 18.67 | 2,054 |

Corresponding Depreciation Reserve Account

|  | Year | Depreciation reserve Jan. 1 | Depreciation allowable | Current retire- ments | Salvage realized | Depreciation reserve Dec. 31 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1954 | - |  | \$1,120 | .................... |  | \$1,120 |
| 1955 | ................................................... | \$1,120 | 2,240 | ...................... | ..................... | 3,360 |
| 1956 | ...................................... | 3,360 | 2,240 |  |  | 5,600 |
| 1957 | .................................................. | 5,600 | 2,054 | \$2,000 | \$200 | 5,854 |
| 1958 | ................ | 5,854 | 1,680 | 2,000 | 200 | 5,734 |
| 1959 | $\ldots . . . . . . . . .$. | 5,734 | 2,054 | 4,000 | 400 | 4,188 |
| 1960 | ................................................. | 4,188 | 2,427 | 2,000 |  | 4,615 |
| 1961 | ......................... | 4,615 | 2,054 | 2,000 | ..................... | 4,669 |

§ 1.167(b)-2 Declining balance method.
(a) Application of method. Under the declining balance method a uniform
rate is applied each year to the unrecovered cost or other basis of the property. The unrecovered cost or other basis is the basis provided by section
$167(\mathrm{~g})$, adjusted for depreciation previously allowed or allowable, and for all other adjustments provided by section 1016 and other applicable provisions of Iaw. The declining balance rate may be determined without resort to formula. Such rate determined under section 167(b)(2) shall not exceed twice the appropriate straight line rate computed without adjustment for salvage. While salvage is not taken into account in determining the annual allowances under this method, in no event shall an asset (or an account) be depreciated below a reasonable salvage value. However, see section 167(f) and §1.167(f)-1 for rules which permit a reduction in the amount of salvage value to be taken into account for certain personal property acquired after October 16, 1962. Also, see section 167(c) and §1.167(c)-1 for restrictions on the use of the declining balance method.
(b) Illustrations. The declining balance method is illustrated by the following examples:

Example (1). A new asset having an estimated useful life of 20 years was purchased on J anuary 1, 1954, for $\$ 1,000$. The normal straight line rate (without adjustment for salvage) is 5 percent, and the declining balance rate at twice the normal straight line rate is 10 percent. The annual depreciation allowances for 1954, 1955, and 1956 are as follows:

| Year | Basis | Declining balance rate (percent) | Depreciation allowance |
| :---: | :---: | :---: | :---: |
| 1954 ....................... | \$1,000 | 10 | \$100 |
| 1955 ...................... | 900 | 10 | 90 |
| 1956 ...................... | 810 | 10 | 81 |

Example (2). A taxpayer filing his returns on a calendar year basis maintains a group account to which a 5 year life and a 40 percent declining balance rate are applicable. Original investment, additions, retirements, and salvage recoveries are the same as those set forth in example (3) of paragraph (b) of $\S 1.167(b)-1$. Although salvage value is not taken into consideration in computing a declining balance rate, it must be recognized and accounted for when assets are retired.

Depreciable Asset Account and Depreciation Computation Using Average Asset and Reserve Balances

|  | Year | Asset balance Jan. 1 | Curren additions | Current retirements | Asset balance Dec. 31 | Average | Average reserve before depreciation | Net de-preciable balance | Rate (pct.) | Allowable deprecia tion |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1954 |  |  | \$12,000 | ........ | \$12,000 | \$6,000 |  | \$6,000 | 40 | \$2,400 |
| 1955 | ............................. | \$12,000 |  | ............. | 12,000 | 12,000 | \$2,400 | 9,600 | 40 | 3,840 |
| 1956 | ............................ | 12,000 | ............. |  | 12,000 | 12,000 | 6,240 | 5,760 | 40 | 2,304 |
| 1957 |  | 12,000 |  | \$2,000 | 10,000 | 11,000 | 7,644 | 3,356 | 40 | 1,342 |
| 1958 |  | 10,000 |  | 2,000 | 8,000 | 9,000 | 7,186 | 1,814 | 40 | 726 |
| 1959 | ............................... | 8,000 | 10,000 | 4,000 | 14,000 | 11,000 | 5,212 | 5,788 | 40 | 2,315 |
| 1960 |  | 14,000 |  | 2,000 | 12,000 | 13,000 | 4,727 | 8,273 | 40 | 3,309 |
| 1961 |  | 12,000 | ............ | 2,000 | 10,000 | 11,000 | 6,036 | 4,964 | 40 | 1,986 |


| DEPRECIATION RESERVE |  |  |  |  |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Year |  |  |  |  |  |  |  |

Where separate depreciation accounts are maintained by year of acquisition and there is an unrecovered balance at the time of the last retirement, such unrecovered balance
may be deducted as part of the depreciation allowance for the year of such retirement. Thus, if the taxpayer had kept separate depreciation accounts by year of acquisition
and all the retirements shown in the example above were from 1954 acquisitions, depre-
ciation would be computed on the 1954 and 1959 acquisitions as follows:

1954 ACQUISITIONS

${ }^{1}$ Balance allowable as depreciation in the year of retirement of the last survivor of the 1954 acquisitions.
Depreciation Reserve for 1954 Acquisitions

|  | Year | Reserve Jan. 1 | Current retirements | Salvage realized | Reserve Dec. 31, before depreciation | Average reserve before depreciation | Allow- able de-preciation | Reserve Dec. 31, after de-preciation |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1954 |  |  |  |  |  |  | \$2,400 | \$2,400 |
| 1955 |  | \$2,400 | -......... | -........ | \$2,400 | \$2,400 | 3,840 | 6,240 |
| 1956 |  | 6,240 |  |  | 6,240 | 6,240 | 2,304 | 8,544 |
| 1957 | $\ldots$ | 8,544 | \$2,000 | \$200 | 6,744 | 7,644 | 1,342 | 8,086 |
| 1958 | ......................... | 8,086 | 2,000 | 200 | 6,286 | 7,186 | 726 | 7,012 |
| 1959 | $\ldots$ | 7,012 | 4,000 | 400 | 3,412 | 5,212 | 315 | 3,727 |
| 1960 | .................................. | 3,727 | 2,000 |  | 1,727 | 2,727 | 109 | 1,836 |
| 1961 | .......... | 1,836 | 2,000 | ........... | (164) | 836 | 164 |  |

1959 ACQUISITIONS

| Year | Asset balance Jan. 1 | Acquisi- | Asset balance Dec. 31 | Avg. balance | Reserve Dec. 31, before depre- ciation | Net de-preciable balance | Rate percent | Allowable de-preciation | Reserve Dec. 31, after de-precia- tion |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1959 |  | \$10,000 | \$10,000 | \$5,000 | None | \$5,000 | 40 | \$2,000 | \$2,000 |
| 1960 | \$10,000 |  | 10,000 | 10,000 | \$2,000 | 8,000 | 40 | 3,200 | 5,200 |
| 1961 ................................ | 10,000 |  | 10,000 | 10,000 | 5,200 | 4,800 | 40 | 1,920 | 7,120 |

In the above example, the allowable depreciation on the 1954 acquisitions totals $\$ 11,200$. This amount when increased by salvage realized in the amount of $\$ 800$, equals the entire cost or other basis of the 1954 acquisitions $(\$ 12,000)$.
(c) Change in estimated useful life. In the declining balance method when a change is justified in the useful life estimated for an account, subsequent computations shall be made as though the revised useful life had been originally estimated. F or example, assume that an account has an estimated useful life of ten years and that a declining balance rate of 20 percent is applicable. If, at the end of the sixth year, it is determined that the remaining
useful life of the account is six years, computations shall be made as though the estimated useful life was originally determined as twelve years. Accordingly, the applicable depreciation rate will be $162 / 3$ percent. This rate is thereafter applied to the unrecovered cost or other basis.
[T.D. 6500, 25 FR 11402, Nov. 26, 1960, as amended by T.D. 6712, 29 FR 3653, Mar. 24, 1964]

## §1.167(b)-3 Sum of the years-digits

 method.(a) Applied to a single asset-(1) General rule. Under the sum of the yearsdigits method annual allowances for depreciation are computed by applying

