# C alculation OF THE RETIREMENT PENSION 

An example showing how a retirement pension is calculated

Suppose a person born in N ovember 1941 becomes entitled to a retirement pension in D ecember 2006. H ow much will the retirement pension be if the person's Statement of Participation shows the earnings entered in column I of the table on the back of this leaflet?

## General rules

A retirement pension corresponds to $25 \%$ of a worker's average monthly adjusted (and non-excluded) pensionable earnings.
The pension for a person under age 65 is reduced, for life, according to an actuarial factor of 0,5\% a month, up to a maximum reduction of $30 \%$ (at age 60 ). If a pension begins after age 65, it is increased in a similar manner.
A retirement pension may be increased in January each year if it is not al ready the maximum payable and the beneficiary made contributions to the Plan in the preceding year.
Disability pensions and surviving spouse's pensions are based on the retirement pension that would have been paid to the contributor, without taking into account the actuarial increase or decrease. T he death benefit is a fixed, lump-sum payment of $2500 \$$.

## The pension calculation has three steps:

- First step: adjusting pensionable earnings
- Second step: determining the months and earnings to be used in the calculation
- Third step: actually calculating the pension


## First step

## Adjusting pensionable earnings

Before calculating the average monthly pensionable earnings, past yearly earnings must be adjusted to their current value. We do this by multiplying each year's pensionable earnings (shown in column I of the table) by the average of the maximum pensionable earnings for the year in which the pension begins and the 4 preceding years (AM PE-5). The result of that operation is then divided by the maximum pensionable earnings (M PE) for the year being adjusted (shown in column II of the table).
For 2006, the person's earnings for 1966 ( in our example, 3267 \$ ) would be adjusted as follows:
$3267 \$ \times$ AM PE-5 for $2006=3267 \$ \times 40540 \$=26488,84 \$$ M PE for 1966

5000 \$

## where

AMPE - $\mathbf{5}$ for $2006=$
(39 100 \$ + $39900 \$+40500 \$+41100 \$+42100 \$) \div 5=40540 \$$
After adjustment, the earnings of 3267 \$ for 1966 are valued at 26 488,84 \$ in current (2006) dollars.
A similar adjustment must be made for each of the years in question. The results are shown in column III of the table.

## Second step

## Determining the months and earnings to be used for the calculation

A person's contributory period begins on the first day of the month that follows the month of his or her 18th birthday, but no earlier than 1 January 1966, and ends at the end of the earliest of the following months:

- the month preceding the one in which a retirement pension becomes payable;
- the one in which the beneficiary reaches age 70;
- the month in which the beneficiary dies.

In our example, the contributory period begins on 1 January 1966 and ends at the end of $N$ ovember 2006, that is, the month which precedes the month in which payment of the pension starts, for a total contributory period of 491 months. (See column $V$ of the table.)
All the pensionable employment earnings during that period can be used in calculating the pension. H owever, the Adt respectingtheQuabec Pension Plan allows the exclusion of the earnings made during $15 \%$ of the months in the contributory period. The months excluded are those in which the person's earnings are the lowest. In the example, a total of 74 months can be excluded ( 491 months $\times 15 \%=74$ ), representing earnings of 141595,71 \$, as shown in columns VI and VII of the table. Therefore, the pension will be calculated on the basis of the best 417 months (491-74=417) with the following earnings (1494 756,27 \$-141 595,71 \$ = 1353 160,56 \$).

## Third step

## Actually calculating the pension

In calculating the average monthly earnings, we must exclude the 74 months mentioned above from the contributory period and at the same time, subtract from the person's total earnings ( 1494 756,27 \$) the earnings for those 74 months of lowest earnings. As shown in column IV of the table, those months are the 12 months of 1966, 1967, 1968, 1969, 1972 and 1979 and 2 months in 1970. This gives the following result:
1494 756,27 \$ - 141 595,71 \$ = 1353 160,56 \$.
The monthly retirement pension corresponds to $25 \%$ of the average monthly earnings for the best 417 months; it is calculated as follows:
$(\underline{25 \times 1} 353160,56 \$) \div 417=811,25 \$$ 100

In our example, payment of the monthly retirement pension of $811,25 \$$ begins in D ecember 2006. If the contributor had contributed the maximum amount for the 417 best months, that is, for 34 years and 9 months, he or she would receive the maximum payable in 2006, that is $844,58 \$$ a month. If the person in our example had reached age:

- 62 (36 months before age 65), the pension would be 665,23 \$ a month, according to the following formula: $811,25 \$-\left[\left[\frac{36 \times 0,5}{100}\right] \times 811,25 \$\right]=665,23 \$$
- $\mathbf{6 7}$ (24 months after age 65 ), the pension would be $908,60 \$$ a month, according to the following formula:
$811,25 \$+\left[\left[\frac{24 \times 0,5}{100}\right] \times 811,25 \$\right]=908,60 \$$

Table of earnings

| Year | $\begin{gathered} \text { I } \\ \text { Pensionable } \\ \text { employment earnings } \\ \$ \end{gathered}$ | Maximum pensionable earnings \$ | IIIAdjusted annual <br> earnings <br> $\$$ | ```IV Adjusted monthly earnings $``` | Months in the contributory period | VI Months excluded (15\%) | $\begin{gathered} \text { VII } \\ \text { Earnings } \\ \text { excluded (15\%) } \\ \$ \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1966 | 3 267* | 5000 | 26 488,84 | 2 207,40 | 12 | 12 | 26 488,84 |
| 1967 | 3 332* | 5000 | 27 015,86 | 2 251,32 | 12 | 12 | 27 015,86 |
| 1968 | 3 659* | 5100 | 29 085,46 | 2 423,79 | 12 | 12 | 29 085,46 |
| 1969 | 3 899* | 5200 | 30 397,20 | 2 533,10 | 12 | 12 | 30 397,20 |
| 1970 | 4 225* | 5300 | 32 317,26 | 2 693,11 | 12 | 2 | 5 386,21 |
| 1971 | 4 422* | 5400 | 33 197,76 | 2 766,48 | 12 |  |  |
| 1972 | 0* | 5500 | 0,00 | 0,00 | 12 | 12 | 0 |
| 1973 | 5900 | 5900 | 40 540,00 | 3 378,33 | 12 |  |  |
| 1974 | 6600 | 6600 | 40 540,00 | 3 378,33 | 12 |  |  |
| 1975 | 7400 | 7400 | 40 540,00 | 3 378,33 | 12 |  |  |
| 1976 | 8300 | 8300 | 40 540,00 | 3 378,33 | 12 |  |  |
| 1977 | 9300 | 9300 | 40 540,00 | 3 378,33 | 12 |  |  |
| 1978 | 10400 | 10400 | 40 540,00 | 3 378,33 | 12 |  |  |
| 1979 | 6 702* | 11700 | 23 222,14 | 1 935,18 | 12 | 12 | 23 222,14 |
| 1980 | 13100 | 13100 | 40 540,00 | 3 378,33 | 12 |  |  |
| 1981 | 14700 | 14700 | 40 540,00 | 3 378,33 | 12 |  |  |
| 1982 | 16500 | 16500 | 40 540,00 | 3 378,33 | 12 |  |  |
| 1983 | 18500 | 18500 | 40 540,00 | 3 378,33 | 12 |  |  |
| 1984 | 20800 | 20800 | 40 540,00 | 3 378,33 | 12 |  |  |
| 1985 | 23400 | 23400 | 40 540,00 | 3 378,33 | 12 |  |  |
| 1986 | 23 466* | 25800 | 36 872,54 | 3 072,71 | 12 |  |  |
| 1987 | 24 113* | 25900 | 37 742,90 | 3 145,24 | 12 |  |  |
| 1988 | 25 232* | 26500 | 38 600,20 | 3 216,68 | 12 |  |  |
| 1989 | 26 101* | 27700 | 38 199,80 | 3 183,32 | 12 |  |  |
| 1990 | 27 332* | 28900 | 38 340,46 | 3 195,04 | 12 |  |  |
| 1991 | 29 954* | 30500 | 39 814,27 | 3 317,86 | 12 |  |  |
| 1992 | 31 250* | 32200 | 39 343,94 | 3 278,66 | 12 |  |  |
| 1993 | 31 782* | 33400 | 38 576,12 | 3 214,68 | 12 |  |  |
| 1994 | 32 751* | 34400 | 38 596,67 | 3 216,39 | 12 |  |  |
| 1995 | 34900 | 34900 | 40 540,00 | 3 378,33 | 12 |  |  |
| 1996 | 33 333* | 35400 | 38 172,88 | 3 181,07 | 12 |  |  |
| 1997 | 35800 | 35800 | 40 540,00 | 3 378,33 | 12 |  |  |
| 1998 | 33 825* | 36900 | 37 161,67 | 3 096,81 | 12 |  |  |
| 1999 | 34 283* | 37400 | 37 161,31 | 3 096,78 | 12 |  |  |
| 2000 | 37600 | 37600 | 40 540,00 | 3 378,33 | 12 |  |  |
| 2001 | 38300 | 38300 | 40 540,00 | 3 378,33 | 12 |  |  |
| 2002 | 35 842* | 39100 | 37 162,01 | 3 096,81 | 12 |  |  |
| 2003 | 36 575* | 39900 | 37 161,67 | 3 096,81 | 12 |  |  |
| 2004 | 37 125* | 40500 | 37 161,67 | 3 096,81 | 12 |  |  |
| 2005 | 37 675* | 41100 | 37 161,67 | 3 096,81 | 12 |  |  |
| 2006 | 38 592\# | 42100 | 37 161,99 | 3 378,36 | 11 |  |  |
| TOTAL |  |  | 1494 756,27 |  | 491 | 74 | 141 595,71 |

Earnings of 141595,71 \$ (for the 74 months of lowest earnings) must be subtracted from 1494756,27 \$, which leaves total earnings of 1353 160,56 \$ for the remaining 417 months.

* The asterisk indicates that the contributor did not reach the maximum pensionable earnings for the year.
\# The pound sign indicates that the annual maximum pensionable earnings have been adjusted to correspond to the 11 months during which the contributor could contribute during the last year of work.

