

Methods of Calculating Lump Sums

All calculations are based on weekly compounding. The weekly interest rate is calculated such that the effective annual rate, compounding weekly, assuming 52 1/7 weeks per year, is 4%. So the weekly interest rate = $(1.04)^{(7/365)} - 1 = 0.000752461$.

[To access the Benefit Calculator click here](#)

Full PPD Lump Sum

For the full PPD lump sum, the amount subject to discount is the entire PPD award less the amount that should have been paid at the time the lump sum is awarded. The amount that should have been paid is comprised of the amount that was actually paid & the amount in arrears. After computing the lump sum for the amount subject to discount, the amount in arrears should be added to give the total lump sum amount. No further PPD payments are owed after payment of the full lump sum.

Let i represent the weekly interest rate = .000752461.

Let P be the weekly payment rate.

Let B be the amount subject to discount.

Let n be the number of weeks remaining,

Let L be the discounted portion of the lump sum.

Finally, let LS be the total lump sum.

Then:

$B = \text{PPD award} - \text{amount paid} - \text{amount in arrears.}$

$n = B / P.$

$\text{exp} = (1 + i) ^ n.$

$L = P * (1 - 1/\text{exp}) / i.$

$LS = L + \text{amount in arrears.}$

$\text{Discount amount} = B - L.$

Full Fatal or PT Lump Sum

For the full fatal or PT lump sum, the amount subject to discount is the weekly payment rate times the number of weeks of life expectancy for the claimant in the case of a PT award and the dependents in the case of a fatal award. A reduction to the payments is done after payment of the full lump sum.

Let i represent the weekly interest rate = .000752461.
Let P be the weekly payment rate.
Let B be the amount subject to discount.
Let n be the number of weeks remaining,
Let L be the discounted portion of the lump sum.
Finally, let LS be the total lump sum.

Then:

$B = \text{PPD award} - \text{amount paid} - \text{amount in arrears}.$

$n = B / P.$

$\text{exp} = (1 + i)^n.$

$L = P * (1 - 1/\text{exp}) / i.$

$LS = L + \text{amount in arrears}.$

Discount amount = $B - L.$

\$10,000 Lump Sum

The \$10,000 lump sum is a special application of the full lump sum.

The next \$10,000 worth of payments (future value) are discounted for the \$10,000 lump sum, resulting in a payment (present value) less than \$10,000. The bi-weekly amount remains the same, but the duration of benefits is reduced by the same amount as it would have taken to pay the next \$10,000 worth of payments.

Let i represent the weekly interest rate = .000752461.

Let P be the weekly payment rate.

Let B be the amount subject to discount.

Let n be the number of weeks remaining,

Let L be the discounted portion of the lump sum.

Then:

$B = \$10,000.$

$n = B / P.$

$\text{exp} = (1 + i)^n.$

$L = P * (1 - 1/\text{exp}) / i.$

Discount amount = $B - L.$

The payments are reduced by n weeks.

Partial PPD lump sum

For the partial PPD lump sum, the nominal lump sum amount is actually the amount paid (present value). The discounted amount is taken uniformly from all remaining payments, reducing the bi-weekly payment rate, but leaving the benefit duration the same.

Let i represent the weekly interest rate = .000752461.

Let P be the weekly payment rate.

Let B be the amount subject to discount.

Let n be the number of weeks remaining,

Let L be the nominal lump sum.

Let LS be the total lump sum.

Let P_n be the new weekly payment rate (after payment of lump sum).

Let NB be the New Balance.

Finally, let C be the Credit to the Respondent.

Then:

$B = \text{PPD award} - \text{amount paid} - \text{amount in arrears.}$

$n = B / P.$

$\text{exp} = (1 + i)^n.$

$P_n = P - Li / (1 - 1/\text{exp}).$

$Lsd = P * (1 - 1/\text{exp}) / i.$

$NB = n * P_n.$

$C = B - NB.$

$LS = L + \text{amount in arrears.}$

$\text{Discount amount} = C - L.$