SUPERANNUATION

SPLITTING LAWS –

VALUATION EXAMPLES

Examples of valuation of superannuation interests using the valuation methods and factors

set out in the *Family Law (Superannuation) Regulations 2001*

Contents

Superannuation splitting laws – valuation examples

We have prepared a number of worked valuation examples for different types of superannuation interests. Hopefully these will help you to use the valuation methods and factors set out in the Family Law (Superannuation) Regulations when you want to value a superannuation interest yourself.

Obviously if you are working out the value of a real superannuation interest you will use the information provided by the trustee rather than the information that we have used in the examples.

This includes the valuation date. In each example we have specified a valuation date. Remember that this date has been assumed for the purpose of the example. You would need to use your own valuation date – and work out the value of "y" and "m", based on your valuation date.

Example 1: Lump sum defined benefit interest in the growth phase held by a current employee of the sponsor of a fund

Scenario

Andreas and Belinda are separating and want to value Andreas' superannuation interest. Andreas was born on 18 March 1960 and has a defined benefit interest that pays a lump sum only. Andreas has not reached a condition of release and so the interest is in the growth phase.

What valuation method do I use?

The Schedules to the Family Law (Superannuation) Regulations provide a number of different methods for valuing a superannuation interest. You need to select the correct one.

In this case, Schedule 2 provides a method for determining the gross value of a defined benefit interest. Part 2 of Schedule 2 provides the method for determining the value when the benefit is payable only as a lump sum – which is the case for Andreas' superannuation interest.

Information required to use the valuation method

You will need the following information, which the trustee of Andreas' superannuation fund will provide, to use the valuation method set out in Part 2 of Schedule 2.

The valuation date is the date at which you want the valuation. In this example it is assumed to be 31 July 2003.

Date of birth	18 March 1960
Current salary for superannuation purposes (salary)	$45,000
Accrued benefit multiple (ABM)	3.9
Scheme Retirement Age	65
Valuation date	31 July 2003

Calculation of the value

The method for the calculation is given in Clause 3(1) of Schedule 2 and it is:

A x fy+m

So you need to work out the value of both:
- A
- fy+m

A – this is defined as the value of the lump sum benefit, and it is the product of member spouse's accrued benefit multiple (ABM) and the relevant salary figure.

fy+m – this is the lump sum valuation factor, and the method for working it out is given in Clause 3(2) of Part 2 of Schedule 2.

First work out the value of A. You know that it is the product of the ABM and the salary:

A = ABM x Salary

The trustee has provided the following information:

ABM = 3.9

Salary = 45,000

So:

A = ABM x Salary

= 3.9 x 45,000

= 175,500

Next work out the value of fy+m using the method given in Clause 3(2) of Schedule 2:

$$fy+m = \frac{(fy \times (12 - m)) + (fy+1 \times m)}{12}$$

where

y = the number of remaining whole years that Andreas has before he reaches retirement age and

m = the number of months, not included in the whole years, that Andreas has before he reaches retirement age

To work out the value of "y" and "m" you need to know when Andreas will reach his retirement age and then work out how much time is left between the valuation date and the date when Andreas' retirement age is reached.

Andreas was born on 18 March 1960. The scheme's retirement age is 65 – so Andreas will reach his retirement date on 18 March 2025. The valuation date in this example is 31 July 2003. So:

Remaining term to retirement as at the valuation date in complete years (y)	21
Complete months of remaining term not included in remaining complete years (m)	7

[Remember that if you use another valuation date you will need to adjust the values of 'y' and 'm' in your calculation.]

Now you look at the table in Clause 4 of Schedule 2, to find the relevant lump sum valuation factors.

Andreas' remaining term to retirement is between 21 years and 22 years, so the factors that you need are:

$f_y = f21 = 0.6207$

$f_{y+1} = f22 = 0.6053$

You now have all the information that you need to calculate f_{y+m}:

$$f_{y+m} = \frac{(f_y \times (12 - m)) + (f_{y+1} \times m)}{12}$$

$$= \frac{(0.6207 \times (12-7) + (0.6053 \times 7)}{12}$$

$$= \frac{(0.6207 \times 5) + (0.6053 \times 7)}{12}$$

$$= \frac{3.1035 + 4.2371}{12}$$

$$= \frac{7.3406}{12}$$

$f_{y+m} = 0.6117$

So, using the original method given in Clause 3(1) of Schedule 2:

Value of the interest = A x f_{y+m}

= 175,500 x 0.6117

= $107,353

Example 2: Pension defined benefit interest in the growth phase held by a current employee of the sponsor of a fund

Scenario

Chris and Daniela are separating and want to value Daniela's superannuation interest. Daniela was born on 24 August 1973 and has a defined benefit interest that pays a pension only. Daniela has not reached a condition of release and so the interest is in the growth phase.

What valuation method do I use?

The Schedules to the Family Law (Superannuation) Regulations provide a number of different methods for valuing a superannuation interest. You need to select the correct one.

In this case, Schedule 2 provides a method for determining the gross value of a defined benefit interest. Part 3 of Schedule 2 provides the method for determining the value when the benefit is payable only as a pension – which is the case for Daniela's superannuation interest.

Information required to use the valuation method

You will need the following information, which the trustee of Daniela's superannuation fund will provide, to use the valuation method set out in Part 3 of Schedule 2.

The valuation date is the date at which you want the valuation. In this example it is assumed to be 7 April 2003.

Date of birth	24 August 1973
Gender	Female
Current salary for superannuation purposes (salary)	$38,000
Accrued pension multiple (APM)	0.09

Guarantee period   Nil

Method of indexation   CPI + 1%

Reversionary percentage (r)   65%

Scheme Retirement Age: 60

Valuation date: 7 April 2003

Calculation of the value

The method for the calculation is given in Clause 5(1) of Schedule 2 and it is:

VN x f_{y+m}

So you need to work out the value of both:
- VN
- f_{y+m}

VN – this is defined as the lump sum value of the accrued pension benefit, and the method for working it out is given in Clause 5(2) of Schedule 2.

f_{y+m} – this is the lump sum valuation factor, and the method for working it out is given in Clause 3(2) of Schedule 2.

So, first work out the value of VN using the method given in Clause 5(2) of Schedule 2, and it is:

$VN = B \times (P_{ra} + (R_{sa} \times r))$

where
- B is the value of the pension benefit accrued (APM) at valuation date x the salary;
- P_{ra} is the pension valuation factor that applies to the pension at Daniela's retirement age;
- R_{sa} is the reversion valuation factor that applies to the pension at Daniela's age in completed years at the valuation date; and
- r is the reversionary percentage.

So

B = APM x salary

   = 0.09 x 38,000

   = 3,420

Next you need to work out the pension valuation factor and you need to pick the appropriate table that describes Daniela's superannuation interest. The retirement age for Daniela's superannuation interest is 60. At the valuation date of 7 April 2033, Daniela is 29 years old (and some months but you don't count them for this calculation). From the information that you got from the trustee of the fund you know that:

- there is no guarantee period; and
- the method of indexation is CPI + 1%.

So the table that you need to use for the pension valuation factor and the reversion valuation factor is the one in Clause 8 of Schedule 2, which lists the valuation factors for a superannuation interest where there is no guarantee period and indexation of CPI +1%.

From that table you get:

$P_{ra} = P_{60} = 17.6687$

$R_{sa} = R_{29} = 1.497$

You know that the reversionary percentage (r) is 65%, from the information that the trustee provided. So you now have all the information needed to calculate VN:

$VN = B \times (P_{ra} + (R_{sa} \times r))$

   = 3,420 x (17.6687 + (1.497 x 65%))

   = 3,420 x (17.6687 + (1.497 x 65/100))

   = 3,420 x (17.6687 + (1.497 x 0.65))

   = 3,420 x (17.6687 + 0.97305)

   = 3,420 x 18.64175

   = $63,755

Next work out the value of f_{y+m} using the method given in Clause 3(2) of Schedule 2:

$$f_{y+m} = \frac{(f_y \times (12 - m)) + (f_{y+1} \times m)}{12}$$

where

y =   the number of remaining whole years that Daniela has before she reaches retirement age; and

m =   the number of months, not included in the whole years, that Daniela has before she reaches   retirement age

To work out the value of "y" and "m" you need to know when Daniela will reach her retirement age and then work out how much time is left between when valuation date and the date when the retirement age is reached.

Daniela was born on 24 August 1973. The scheme's retirement age is 60 – so Daniela will reach her retirement date on 24 August 2003. The valuation date in this example is 7 April 2003. So:

Remaining term to retirement as at the valuation date
in complete years (y)   30

Complete months of remaining term not included
in remaining complete years (m)   4

[Remember that if you use another valuation date you will need to adjust the values of 'y' and 'm' in your calculation.]

Now you look at the table in Clause 4 of Part 2 of Schedule 2, to find the relevant lump sum valuation factors.

Daniela's remaining term to retirement is between 30 years and 31 years, so the factors that you need are:

$f_y = f_{30} = 0.4935$

$f_{y+1} = f_{31} = 0.4800$

You now have all the information that you need to calculate f_{y+m}:

$$f_{y+m} = \frac{(f_y \times (12 - m)) + (f_{y+1} \times m)}{12}$$

$$= \frac{(0.4935 \times (12-4) + (0.4800 \times 4)}{12}$$

$$= \frac{(0.4935 \times 8) + (0.4800 \times 4)}{12}$$

$$= \frac{3.948 + 1.9200}{12}$$

$$= \frac{5.868}{12}$$

$$f_{y+m} = 0.4890$$

So, using the original method given in Clause 5(1) of Part 2 of Schedule 2:

Value of the interest = VN x f_{y+m}

$$= 63,755 \times 0.4890$$

$$= \$31,176$$

Example 3: Defined benefit interest in the growth phase held by a current employee of the sponsor of a fund which is payable either as a pension or lump sum, with no restriction on the combination

Scenario

Eduardo and Fran are separating and want to value Eduardo's superannuation interest. Eduardo was born on 11 January 1946 and has a defined benefit interest that pays either a pension or a lump sum, with no restriction on the combination. Eduardo has not reached a condition of release and so the interest is in the growth phase.

What valuation method do I use?

The Schedules to the Family Law (Superannuation) Regulations provide a number of different methods for valuing a superannuation interest. You need to select the correct one.

In this case, Schedule 2 provides a method for determining the gross value of a defined benefit interest. Part 4 of Schedule 2 provides the method for determining the value when the benefit is payable as a combination of lump sum and pension. There are two variations on how the lump sum and pension can be combined:

- no restriction on the combination of lump sum and pension that may be taken; and
- restriction on the maximum amount of lump sum that may be taken

In Eduardo's case, you know that there is no restriction on the combination of lump sum and pension that may be taken – so the appropriate method is the one set out in Clause 28 of Schedule 2.

Information required to use the valuation method

You will need the following information, which the trustee of Eduardo's superannuation fund will provide, to use the valuation method set out in Part 4 of Schedule 2.

The valuation date is the date at which you want the valuation. In this example it is assumed to be 7 April 2003.

Date of birth	11 January 1946
Gender	Male
Current salary for superannuation purposes (salary)	$72,000
Accrued benefit multiple (ABM)	6.3
Pension conversion factor at age 65 (pcf)	12
Guarantee period on pension	5 years
Method of indexation	5%
Reversionary percentage (r)	55%
Scheme Retirement Age	65
Valuation date	22 November 2003

Calculation of the value

The method for the calculation is given in Clause 28 of Schedule 2 and it is:

$$\frac{PV_{ls} + PV_p}{2}$$

So you need to work out the value of both:

- PV_{ls}
- PV_p

PV_{ls} – this is the present value of the lump sum that would apply if the whole benefit could be, and was, taken as a lump sum, calculated using the method set out in Part 2 of Schedule 2.

PV_p – this is the present value of the pension that would apply if the whole benefit could be, and was, taken as a pension, calculated using the method set out in Part 3 of Schedule 2.

So, first you need to work out the value of PV_{ls} using the method set out in Clause 3(1) of Schedule 2, and it is

$A \times f_{y+m}$

So you need to work out the value of both:

- A
- f_{y+m}

A – this is defined as the value of the lump sum benefit, and it is the product of member spouse's accrued benefit multiple (ABM) and the relevant salary figure.

f_{y+m} – this is the lump sum valuation factor, and the method for working it out is given in Clause 3(2) of Schedule 2.

First work out the value of A. You know that it is the product of the ABM and the salary:

A = ABM x Salary

The trustee has provided the following information:

ABM = 6.3

Salary = 72,000

A = ABM x Salary

  = 6.3 x 72,000

  = 453,600

Next work out the value of f_{y+m} using the method given in Clause 3(2) of Schedule 2:

$$f_{y+m} = \frac{(f_y \times (12 - m)) + (f_{y+1} \times m)}{12}$$

where

y = the number of remaining whole years that Eduardo has before he reaches retirement age and

m = the number of months, not included in the whole years, that Eduardo has before he reaches retirement age

To work out the value of "y" and "m" you need to know when Eduardo will reach his retirement age and then work out how much time is left between when the valuation date and the date when Eduardo's retirement age is reached.

Eduardo was born on 11 January 1946. The scheme's retirement age is 65 – so Eduardo will reach his retirement date on 11 January 2011. The valuation date in this example is 22 November 2003. So:

Remaining term to retirement as at the valuation date
in complete years (y)   7

Complete months of remaining term not included
in remaining complete years (m)   1

[Remember that if you use another valuation date you will need to adjust the values of 'y' and 'm' in your calculation.]

Now you look at the table in Clause 4 of Schedule 2, to find the relevant lump sum valuation factors.

Eduardo's remaining term to retirement is between 7 years and 8 years, so the factors that you need are:

$f_y = f_7 = 0.8763$

$f_{y+1} = f_8 = 0.8551$

You now have all the information that you need to calculate f_{y+m}:

$$f_{y+m} = \frac{(f_y \times (12 - m)) + (f_{y+1} \times m)}{12}$$

$$= \frac{(0.8763 \times (12-1) + (0.8551 \times 1)}{12}$$

$$= \frac{(0.8763 \times 11) + 0.8551}{12}$$

$$= \frac{9.6393 + 0.8551}{12}$$

$$= \frac{10.4944}{12}$$

$f_{y+m} = 0.8745$

So, using the original method given in Clause 3(1) of Schedule 2, if the entire benefit were to be taken as a lump sum:

$PV_{ls} = A \times f_{y+m}$

$= 453,600 \times 0.8745$

$= \$396,673$

Now you need to work out the value of PV_p using the method set out in Clause 5(1) of Schedule 2, and it is

$VN \times f_{y+m}$

So you need to work out the value of VN. Remember you don't need to work out the value of f_{y+m} as you have already done it.

The value of VN is worked out using the following method, given in Clause 5(2) of Schedule 2:

$VN = B \times (P_{ra} + (R_{sa} \times r))$

where
- B is the value of the pension benefit accrued (APM) at valuation date x the salary;
- P_{ra} is the pension valuation factor that applies to the pension at Eduardos's retirement age;
- R_{sa} is the reversion valuation factor that applies to the pension at Eduardo's age in completed years at the valuation date; and
- r is the reversionary percentage.

The information that you have received from the trustee does not give you the APM. But you can work it out from the information you have using the following method:

APM = $\dfrac{\text{ABM}}{\text{pcf}}$

You know that

ABM = 6.3

pcf = 12

So, using this information:

APM = $\dfrac{6.3}{12}$

= 0.525

Now you can work out the value of B:

B = APM x salary

= 0.525 x 72,000

= 37,800

Next you need to work out the pension valuation factor and you need to pick the appropriate table that describes Eduardo's superannuation interest. The retirement age for Eduardo's superannuation interest is 65. At the valuation date of 22 November 2003, Eduardo is 57 years old (and some months but you don't count them for this calculation). From the information that you got from the trustee of the fund you know that:

- there is a guarantee period on the pension of 5 years; and
- the method of indexation is 5%.

So the table that you need to use for the pension valuation factor and the reversion valuation factor is the one in Clause 19 of Schedule 2, which lists the valuation factors where there is a 5 year guarantee period and indexation of 5%. From that table you get:

$P_{ra} = P_{65} = 15.6603$

$R_{sa} = R_{57} = 0.812$

You know that the reversionary percentage (r) is 55%, from the information that the trustee provided. So you now have all the information needed to calculate VN:

$VN = B \times (P_{ra} + (R_{sa} \times r))$

$= 37{,}800 \times (15.6603 + (0.812 \times 55\%)$

$= 37{,}800 \times (15.6603 + (0.812 \times 55/100)$

$= 37{,}800 \times (15.6603 + (0.812 \times 0.55)$

$= 37{,}800 \times (15.6603 + 0.4466)$

$= 37{,}800 \times 16.1069$

$= \$608{,}841$

You have already calculated the value of f_{y+m} - and worked out that:

$f_{y+m} = 0.8745$

So you can now work out, the value of PV_p, and it is:

$PV_{p} = VN \times f_{y+m}$

$= 608{,}841 \times 0.8745$

$= \$532{,}431$

So, you have done the calculations that you need to work out the value of Eduardo's superannuation interest.

$Value = \dfrac{PV_{ls} + PV_p}{2}$

$= \dfrac{396{,}673 + 532{,}431}{2}$

$= \$464{,}552$

Example 4: Defined benefit interest in the growth phase which is payable as a pension with the option to commute up to 30% of the held by a current employee of the sponsor of a fund pension to a lump sum

Scenario

Giorgio and Hepzibah are separating and want to value Hepzibah's superannuation interest. Hepzibah was born on 23 May 1967 and has a defined benefit interest which is payable as a pension and which has an option to commute up to 30% of the pension to a lump sum. Hepzibah has not reached a condition of release and so the interest is in the growth phase.

What valuation method do I use?

The Schedules to the Family Law (Superannuation) Regulations provide a number of different methods for valuing a superannuation interest. You need to select the correct one.

In this case, Schedule 2 provides a method for determining the gross value of a defined benefit interest. Part 4 of Schedule 2 provides the method for determining the value when the benefit is payable as a combination of lump sum and pension. There are two variations on how the lump sum and pension can be combined:

- no restriction on the combination of lump sum and pension that may be taken; and

- restriction on the maximum amount of lump sum that may be taken

In Hepzibah's case, you know that there is a restriction on the combination of lump sum and pension that may be taken – so the appropriate method is the one set out in Clause 29 of Schedule 2.

Information required to use the valuation method

You will need the following information, which the trustee of Hepzibah's superannuation fund will provide, to use the valuation method set out in Part 4 of Schedule 2.

The valuation date is the date at which you want the valuation. In this example it is assumed to be 30 April 2003.

Date of birth	23 May 1967
Gender	Female
Current salary for superannuation purposes (salary)	$51,000
Accrued pension multiple (APM)	0.22
Lump sum commutation factor (cf)	10
Guarantee period on pension	Nil
Method of indexation	CPI
Reversionary percentage (r)	0%
Scheme Retirement Age	65
Valuation date	30 April 2003

Calculation of the value

The method for the calculation is given in Clause 29 of Schedule 2. Because the proportion of the pension that Hepzibah can commute to a lump sum is less than 50%, the method for calculation is the one in Clause 29(3) of Schedule 2, and it is:

$$(Max_{ls\%} \times PV_{ls}) + ((1 - Max_{ls\%}) \times PV_p)$$

where:
- $Max_{ls\%}$ is the maximum possible lump sum expressed as a percentage of the total value of the interest
- PV_{ls} is the present value of the lump sum that would apply if the whole benefit could be, and was, taken as a lump sum, calculated using the method set out in Part 2 of Schedule 2
- PV_p – this is the present value of the pension that would apply if the whole benefit could be, and was, taken as a pension, calculated using the method set out in Part 3 of Schedule 2

You know, because the trustee has told you, that the maximum possible lump sum that Hepzibah can take is 30% of the value of the pension, so

$Max_{ls\%} = 30\%$

So you need to work out the value of both:
- PV_{ls}
- PV_p

First work out the value of PV_{ls} using the method set out in Clause 3(1) of Schedule 2, and it is

$A \times f_{y+m}$

So you need to work out the value of both:
- A - defined as the value of the lump sum benefit, and it is the product of member spouse's accrued benefit multiple (ABM) and the relevant salary figure.
- f_{y+m} - this is the lump sum valuation factor, and the method for working it out is given in Clause 3(2) of Schedule 2.

First work out the value of A. You know that it is the produced of the ABM and the salary, that is:

$A = ABM \times salary$

The trustee has not provided information about the ABM. But the trustee has provided the information that you need to calculate it using the following method:

$ABM = APM \times cf$

You know that

$APM = 0.22$

$cf = 10$

So

$ABM = APM \times cf$

$= 0.22 \times 10$

= 2.2

Now you can work out the value of A:

A = ABM x Salary

= 2.2 x 51,000

= 112,200

Next work out the value of f_{y+m} using the method given in Clause 3(2) of Schedule 2:

$$f_{y+m} = \frac{(f_y \times (12 - m)) + (f_{y+1} \times m)}{12}$$

where

y = the number of remaining whole years that Hepzibah has before she reaches retirement age and

m = the number of months, not included in the whole years, that Hepzibah has before she reaches retirement age

To work out the value of "y" and "m" you need to know when Hepzibah will reach her retirement age and then work out how much time is left between when the valuation date and the date when Hepzibah's retirement age is reached.

Hepzibah was born on 23 May 1967. The scheme's retirement age is 65 – so Hepzibah will reach her retirement date on 23 May 2032. The valuation date in this example is 30 April 2003. So:

Remaining term to retirement as at the valuation date
in complete years (y)   29

Complete months of remaining term not included
in remaining complete years (m)   0

[Remember that if you use another valuation date you will need to adjust the values of 'y' and 'm' in your calculation.]

Now you look at the table in Clause 4 of Schedule 2, to find the relevant lump sum valuation factors.

Hepzibah's remaining term to retirement is between 29 years and 30 years, so the factors that you need are:

$f_y = f_{29} = 0.5065$

$f_{y+1} = f_{30} = 0.4935$

You now have all the information that you need to calculate f_{y+m}:

$$f_{y+m} = \frac{(f_y \times (12 - m)) + (f_{y+1} \times m)}{12}$$

$$= \frac{(0.5065 \times (12-0) + (0.4935 \times 0)}{12}$$

$$= \frac{(0.5065 \times 12) + 0}{12}$$

$$= \frac{6.078}{12}$$

$f_{y+m} = 0.5065$

So, using the original method given in Clause 3(1) of Schedule 2, if the entire benefit were to be taken as a lump sum:

$PV_{ls} = A \times f_{y+m}$

$= 112,200 \times 0.5065$

$= \$56,829$

Now you need to work out the value of PV_p using the method set out in Clause 5(1) of Schedule 2, and it is

$VN \times f_{y+m}$

So you need to work out the value of VN. Remember you don't need to work out the value of f_{y+m} as you have already done it.

The value of VN is worked out using the following method, given in Clause 5(2) of Schedule 2:

VN = B x (P_{ra} + (R_{sa} x r))

where

- B is the value of the pension benefit accrued (APM) at valuation date x the salary;
- P_{ra} is the pension valuation factor that applies to the pension at Hepzibah's retirement age;
- R_{sa} is the reversion valuation factor that applies to the pension at Hepzibah's age in completed years at the valuation date; and
- r is the reversionary percentage.

You know, because the trustee has told you, the value of the APM and the salary, so you can work out the value of B:

B =APM x salary

 = 0.22 x 51,000

 = 11,220

Next you need to work out the pension valuation factor and you need to pick the appropriate table that describes Hepzibah's superannuation interest. The retirement age for Hepzibah's superannuation interest is 65. At the valuation date of 30 April 2003, Hepzibah is 35 years old (and some months but you don't count them for this calculation). From the information that you got from the trustee of the fund you know that:

- there is no guarantee period on the pension; and
- the method of indexation is CPI.

So the table that you need to use for the pension valuation factor and the reversion valuation factor is the one in Clause 7 of Schedule 2, which lists the valuation factors where there is no guarantee period and CPI indexation. From that table you get:

P_{ra} = P_{65} = 14.0096

$R_{sa} = R_{35} = 1.189$

You know that the reversionary percentage (r) is 0%, from the information that the trustee provided. So you now have all the information needed to calculate VN:

$VN = B \times (P_{ra} + (R_{sa} \times r))$

$= 11,220 \times (14.0096 + (14.0096 \times 0\%)$

$= 11,220 \times (14.0096 + (14.0096 \times 0)$

$= 11,220 \times (14.0096 + 0)$

$= 11,220 \times 14.0096$

$= 157,188$

You have already calculated the value of f_{y+m} - and worked out that:

$f_{y+m} = 0.5065$

So you can now work out, the value of PV_p, and it is:

$PV_p = VN \times f_{y+m}$

$= 157,188 \times 0.5065$

$= \$79,616$

So, you have done the calculations that you need to work out the value of Hepzibah's superannuation interest.

$Value = (Max_{ls\%} \times PV_{ls}) + ((1 - Max_{ls\%}) \times PV_p)$

$= (30\% \times 56,829) + ((1 - 30\%) \times 79,616)$

$= (30/100 \times 56,829) + ((1 - 30/100) \times 79,616)$

$= (0.30 \times 56,829) + ((1 - 0.30) \times 79,616)$

$= (0.30 \times 56,829) + (0.70 \times 79,616)$

$= 17,049 + 55,731$

= $72,780

Example 5: Pension defined benefit interest in the growth phase – accrued pension multiple not defined

Scenario

Ivan and Jamila are separating and want to value Jamila's superannuation interest. Jamila was born on 6 September 1952 and has a defined benefit interest that pays a pension only. Jamila has not reached a condition of release and so the interest is in the growth phase.

What valuation method do I use?

The Schedules to the Family Law (Superannuation) Regulations provide a number of different methods for valuing a superannuation interest. You need to select the correct one.

In this case, Schedule 2 provides a method for determining the gross value of a defined benefit interest. Part 3 of Schedule 2 provides the method for determining the value when the benefit is payable only as a pension – which is the case for Jamila's superannuation interest.

Information required to use the valuation method

You will need the following information, which the trustee of Jamila's superannuation fund will provide, to use the valuation method set out in Part 3 of Schedule 2.

The valuation date is the date at which you want the valuation. In this example it is assumed to be 27 May 2003.

Date of birth	6 September 1952
Gender	Female
Current salary for superannuation purposes (salary)	$68,000
Date joined the superannuation scheme	4 February 1976
Accrued pension multiple (APM)	Not defined

- but trustee has advised that a pension of 40% of salary is payable at the earliest retirement age of 55

Guarantee period	Nil
Method of indexation	3%
Reversionary percentage (r)	67%
Scheme Retirement Age	65
Valuation date	27 May 2003

Calculation of the value

The method for the calculation is given in Clause 5(1) of Schedule 2 and it is:

$VN \times f_{y+m}$

So you need to work out the value of both:

- V
- f_{y+m}

VN – this is defined as the lump sum value of the accrued pension benefit, and the method for working it out is given in Clause 5(2) of Schedule 2.

f_{y+m} – this is the lump sum valuation factor, and the method for working it out is given in Clause 3(2) of Schedule 2.

So, first work out the value of VN using the method given in Clause 5(2) of Schedule 2, and it is:

$VN = B \times (P_{ra} + (R_{sa} \times r))$

where

- B is the value of the pension benefit accrued (APM) at valuation date x the salary;
- P_{ra} is the pension valuation factor that applies to the pension at Jamila's retirement age;
- R_{sa} is the reversion valuation factor that applies to the pension at Jamila's age in completed years at the valuation date; and

- r is the reversionary percentage.

First you need to work out the value of B, using the following method:

B =APM x salary

You know the salary, but you don't know the APM because the trustee hasn't given it to you. The superannuation splitting laws say that if there is no APM defined then you work one out using the following method, set out in regulation 65(5) of the FL Super Regulations:

$$APM = PM \times \frac{T_1}{T_2}$$

Where:
- PM is the pension multiple applied to the member's salary at the earliest retirement date
- T_1 is the length of service at the valuation date
- T_2 is the length of service from the date when the member joined the scheme to the earliest retirement date

You know that:
- the pension multiple at the earliest retirement date is 40%
- Jamila was born on 6 September 1952 and joined the scheme on 4 February 1976
- the valuation date is 27 May 2003
- the earliest retirement date is at age 55

You can work out that for Jamila:

the length of service at valuation date (T_1)= 9975 days

the length of service to earliest retirement date = 1563 days

the length of service from the joining date to the earliest retirement date (T_2) = 9975 + 1563 days

So, now you can calculate the APM:

$$APM = PM \times \frac{T_1}{T_2}$$

= 40% x <u>9975</u>

      (9975 + 1563)

= 40% x <u>9975</u>

       11538

= 40% x 0.8645

= 0.346

Now you can work out the value of B, using the following method:

B =APM x salary

  = 0.346 x 68,000

  = 23,528

Next you need to work out the pension valuation factor and you need to pick the appropriate table that describes Jamila's superannuation interest. The retirement age for Jamila's superannuation interest is 65. At the valuation date of 27 May 2003, Jamila is 50 years old (and some months but you don't count them for this calculation). From the information that you got from the trustee of the fund you know that:

- there is no guarantee period; and
- the method of indexation is 3%.

So the table that you need to use for the pension valuation factor and the reversion valuation factor is the one in Clause 11 of Schedule 2, which lists the valuation factors for a superannuation interest where there is no guarantee period and indexation of 3%.

From that table you get:

$P_{ra} = P_{65} = 14.7298$

$R_{sa} = R_{50} = 0.533$

You know that the reversionary percentage (r) is 67%, from the information that the trustee provided. So you now have all the information needed to calculate VN:

$VN = B \times (P_{ra} + (R_{sa} \times r))$

$= 23,528 \times (14.7298 + (0.533 \times 67\%))$

$= 23,528 \times (14.7298 + (0.533 \times 67/100))$

$= 23,528 \times (14.7298 + (0.533 \times 0.67))$

$= 23,528 \times (14.7298 + 0.3571)$

$= 23,528 \times 15.0869$

$= \$354,965$

Next work out the value of f_{y+m} using the method given in Clause 3(2) of Schedule 2:

$$f_{y+m} = \frac{(f_y \times (12 - m)) + (f_{y+1} \times m)}{12}$$

where

$y =$ the number of remaining whole years that Jamila has before she reaches retirement age; and

$m =$ the number of months, not included in the whole years, that Jamila has before she reaches   retirement age

To work out the value of "y" and "m" you need to know when Jamila will reach her retirement age and then work out how much time is left between when valuation date and the date when the retirement age is reached.

Jamila was born on 6 September 1952. The scheme's retirement age is 65 – so Jamila will reach her retirement date on 6 September 2017. The valuation date in this example is 27 May 2003. So:

Remaining term to retirement as at the valuation date
in complete years (y)   14

Complete months of remaining term not included

in remaining complete years (m)   3

[Remember that if you use another valuation date you will need to adjust the values of 'y' and 'm' in your calculation.]

Now you look at the table in Clause 4 of Part 2 of Schedule 2, to find the relevant lump sum valuation factors.

Jamila's remaining term to retirement is between 14 years and 15 years, so the factors that you need are:

$f_y = f_{14} = 0.7384$

$f_{y+1} = f_{15} = 0.7204$

You now have all the information that you need to calculate f_{y+m}:

$$f_{y+m} = \frac{(f_y \times (12 - m)) + (f_{y+1} \times m)}{12}$$

$$= \frac{(0.7384 \times (12 - 3)) + (0.7204 \times 3)}{12}$$

$$= \frac{(0.7384 \times 9) + (0.7204 \times 3)}{12}$$

$$= \frac{6.6456 + 2.1612}{12}$$

$$= \frac{8.8068}{12}$$

$f_{y+m} = 0.7339$

So, using the original method given in Clause 5(1) of Part 2 of Schedule 2:

Value of the interest = VN x f_{y+m}

            = 354,965 x 0.7339

= $260,509

Example 6: Lump sum defined benefit interest in the growth phase held by a former employee of the sponsor of a fund

Scenario

Wayne and Lisa are separating and want to value Wayne's superannuation interest. Wayne was born on 18 November 1972 and has a defined benefit interest relating to prior employment that pays a lump sum only, comprising two components.

The first component is the employer component, the value of which increases in line with the Consumer Price Index. The second component is the member component which grows with the fund crediting rate. Both components cannot be accessed until age 55. Wayne has not reached a condition of release and so the interest is in the growth phase.

What valuation method do I use?

The Schedules to the Family Law (Superannuation) Regulations provide a number of different methods for valuing a superannuation interest. You need to select the correct one.

In this case, Schedule 2 provides a method for determining the gross value of a defined benefit interest relating to former employment. Part 5 of Schedule 2 provides the method for determining the value when the benefit held by a former employee is payable only as a lump sum – which is the case for Wayne's superannuation interest.

Information required to use the valuation method

You will need the following information, which the trustee of Wayne's superannuation fund will provide, to use the valuation method set out in Part 5 of Schedule 2.

The valuation date is the date on which the calculation is being made. In this example it is assumed to be 30 September 2006.

Date of birth   18 November 1972

Nominal Value of the first (employer) component of the lump sum	$80,000
Nominal Value of the second (member) component of the lump sum	$30,000
Minimum Deferral Age	55
Valuation date	30

September 2006

Calculation of the value

As Wayne's lump sum comprises different components, the method for the calculation is given in Clause 31(2) of Schedule 2. The method for calculating the value of a lump sum that does not comprise different components is set out in Clause 33 of Schedule 2.

The value is the sum of the gross value of each component comprising the lump sum, calculated as:

$DB \times D_{y+m}$

where

- DB is defined as the nominal value of the component of the lump sum
- D_{y+m} is the discount valuation factor, and the method for working it out is given in Clause 31(3) of Part 5 of Schedule 2.

For each of the two components you need to work out the value of D_{y+m} using the method given in Clause 31(3) of Part 5 of Schedule 2:

$$D_{y+m} = \frac{(D_y \times (12 - m)) + (D_{y+1} \times m)}{12}$$

where

y = the number of remaining whole years that Wayne has before he reaches minimum deferral age and

m = the number of months, not included in the whole years, that Wayne has before he reaches the minimum deferral age

To work out the value of "y" and "m" you need to know when Wayne will reach his minimum deferral age and then work out how much time is left between the valuation date and the date when Wayne's minimum deferral age is reached.

Wayne was born on 18 November 1972. The scheme's minimum deferral age is 55 – so Wayne will reach his minimum deferral age on 18 November 2027. The valuation date in this example is 30 September 2006. So:

Remaining term to age 55 as at the valuation date
in complete years (y)   21

Complete months of remaining term not included
in remaining complete years (m)   1

[Remember that if you use another valuation date you will need to adjust the values of 'y' and 'm' in your calculation.]

Now you look at the table in Clause 32 of Schedule 2, to find the relevant discount valuation factors. Wayne's first component is the employer component, the value of which increases in line with the Consumer Price Index. Hence the relevant column in the table is the one with the heading 'Lump sum indexed in line with CPI'.

Wayne's remaining term to retirement is between 21 years and 22 years, so the factors that you need are:

$D_y = D_{21} = 0.467$

$D_{y+1} = D_{22} = 0.451$

You now have all the information that you need to calculate D_{y+m}:

$$D_{y+m} = \frac{(D_y \times (12 - m)) + (D_{y+1} \times m)}{12}$$

$$= \frac{(0.467 \times (12-1) + (0.451 \times 1)}{12}$$

$$= \frac{(0.467 \times 11) + (0.451 \times 1)}{12}$$

$$= \frac{5.137 + 0.451}{12}$$

$$= \frac{5.588}{12}$$

$D_{y+m} = 0.466$

So, using the original method given in Clause 31(2) of Schedule 2:

Value of the first (employer) component $= DB \times D_{y+m}$

$$= 80,000 \times 0.466$$

$$= \$37,280$$

The second component of the benefit, the \$30,000 member component, grows with the fund crediting rate. As outlined in Clause 32(5), where a benefit is indexed at a fund crediting rate the discount valuation factor is 1. Hence the second component is valued as follows.

Value of the second (member) component $= DB \times D_{y+m}$

$$= 30,000 \times 1$$

$$= \$30,000$$

The value of the total interest is then calculated by summing the value of each of the components.

Value of the interest $= 37,280 + 30,000$

$$= \$67,280$$

Example 7:   Pension defined benefit interest in the growth phase held by a former employee of the sponsor of a fund

Scenario

Brad and Heidi are separating and want to value Heidi's superannuation interest. Heidi was born on 20 December 1970 and has a defined benefit interest relating to prior employment that pays a pension only. Heidi has not reached a condition of release and so the interest is in the growth phase.

What valuation method do I use?

The Schedules to the Family Law (Superannuation) Regulations provide a number of different methods for valuing a superannuation interest. You need to select the correct one.

In this case, Schedule 2 provides a method for determining the gross value of a defined benefit interest. Part 6 of Schedule 2 provides the method for determining the value when the benefit is payable only as a pension – which is the case for Heidi's superannuation interest.

Information required to use the valuation method

You will need the following information, which the trustee of Heidi's superannuation fund will provide, to use the valuation method set out in Part 6 of Schedule 2.

The valuation date is the date on which the calculation is being made. In this example it is assumed to be 20 August 2006.

Heidi's date of birth	20 December 1970
Gender	Female
Guarantee period	Nil
Method of indexation	CPI

Reversionary percentage (r)	67%
Scheme minimum deferral age:	55
Annual amount of pension (DBP)	$20,000
Valuation date:	20 August 2006

Calculation of the value

The method for the calculation is given in Clause 34(2) of Schedule 2 and it is:

$DBP \times (P_{da} + (R_{sa} \times r)) \times D_{y+m}$

where

- DBP is the annual amount of pension at the valuation date if the pension were to commence on completion of the minimum deferral period;
- P_{da} is the pension valuation factor;
- R_{sa} is the reversion valuation factor that applies to the pension at Heidi's age in completed years at the valuation date;
- r is the reversionary percentage; and
- D_{y+m} is the discount valuation factor.

You know the value of DBP and r, as the trustee has given you this information. But you will need to determine the values of $P_{da,}$ R_{sa} and D_{y+m}.

First you need to work out the pension valuation factor and you need to pick the appropriate table that describes Heidi's superannuation interest. The minimum deferral age for Heidi's superannuation interest is 55. At the valuation date of 20 August 2006, Heidi is 35 years old (and some months but you don't count them for this calculation). From the information that you got from the trustee of the fund you know that:

- there is no guarantee period; and
- the method of indexation is CPI.

So the table that you need to use for the pension valuation factor and the reversion valuation factor is the one in Clause 7 of Schedule 2, which lists the valuation factors for a superannuation interest where there is no guarantee period and indexation of CPI.

From that table you get:

$P_{da} = P_{55} = 17.2848$

$R_{sa} = R_{35} = 1.189$

Next work out the value of D_{y+m} using the method given in Clause 34(3) of Part 6 of Schedule 2:

$$D_{y+m} = \frac{(D_y \times (12 - m)) + (D_{y+1} \times m)}{12}$$

where

y = the number of remaining whole years that Heidi has before she reaches minimum deferral age and

m = the number of months, not included in the whole years, that Heidi has before she reaches the minimum deferral age

To work out the value of "y" and "m" you need to know when Heidi will reach her minimum deferral age and then work out how much time is left between the valuation date and the date when Heidi's minimum deferral age is reached.

Heidi was born on 20 December 1970. The scheme's minimum deferral age is 55 – so Heidi will reach her minimum deferral age on 20 December 2025. The valuation date in this example is 20 August 2006. So:

Remaining term to age 55 as at the valuation date
in complete years (y)   19

Complete months of remaining term not included
in remaining complete years (m)   4

[Remember that if you use another valuation date you will need to adjust the values of 'y' and 'm' in your calculation.]

Now you look at the table in Clause 35 of Part 5, to find the relevant discount valuation factors. As the pension increases in line with the Consumer Price Index, the relevant column in the table is the one with the heading 'Pension indexed in line with CPI'.

Heidi's remaining term to age 55 is between 19 years and 20 years, so the factors that you need are:

$D_y = D_{19} = 0.502$

$D_{y+1} = D_{20} = 0.485$

You now have all the information that you need to calculate D_{y+m}:

$D_{y+m} = \dfrac{(D_y \times (12 - m)) + (D_{y+1} \times m)}{12}$

$= \dfrac{(0.502 \times (12\text{-}4) + (0.485 \times 4)}{12}$

$= \dfrac{(0.502 \times 8) + (0.485 \times 4)}{12}$

$= \dfrac{4.016 + 1.940}{12}$

$= \dfrac{5.956}{12}$

$D_{y+m} = 0.496$

You know that the reversionary percentage (r) is 67%, from the information that the trustee provided. So, you have done the calculations that you need to work out the value of Heidi's superannuation interest.

Value $= DBP \times (P_{da} + (R_{sa} \times r)) \times D_{y+m}$

$= 20{,}000 \times (17.2848 + (1.189 \times 67\%)) \times 0.496$

$= \$179{,}368$

Example 8: Defined benefit interest in the growth phase held by a former employee of the sponsor of a fund which is payable as a lump sum with the option to convert up to 30% of the lump sum to a pension

Scenario

Jason and Sharon are separating and want to value Jason's superannuation interest. Jason was born on 23 April 1963 and has a defined benefit interest which is payable as a lump sum and which has an option to convert up to 30% of the lump sum to a pension at a conversion rate of $10 of lump sum to $1pa of pension. The lump sum increases in line with the Consumer Price Index. Jason has not reached a condition of release and so the interest is in the growth phase. What valuation method do I use?

What valuation method do I use?

The Schedules to the Family Law (Superannuation) Regulations provide a number of different methods for valuing a superannuation interest. You need to select the correct one.

In this case, Schedule 2 provides a method for determining the gross value of a defined benefit interest. Part 7 of Schedule 2 provides the method for determining the value when the benefit is payable as a combination of lump sum and pension. There are three variations on how the lump sum and pension can be combined:

- no restriction on the combination of lump sum and pension that may be taken;
- restriction on the proportion of pension that may be taken as a lump sum; and
- restriction on lump sum amount that may be taken as pension.

In Jason's case, you know that there is a restriction on the on the proportion of lump sum that may be taken as a pension – so the appropriate method is the one set out in Clause 39 of Schedule 2.

Information required to use the valuation method

You will need the following information, which the trustee of Jason's superannuation fund will provide, to use the valuation method set out in Part 7 of Schedule 2.

The valuation date is the date on which the calculation is being made. In this example it is assumed to be 22 November 2006.

Date of birth	23 April 1963
Gender	Male
Guarantee period on pension	Nil
Method of indexation	CPI
Reversionary percentage (r)	60%
Minimum deferral age	55
Valuation date	22 November 2006
Nominal value of lump sum at the valuation date (DB)	$100,000
Annual amount of pension (DBP) assuming the entire lump sum could be converted to a pension	$10,000

Calculation of the value

The method for the calculation is given in Clause 39(2) of Schedule 2, and it is:

$$((1 - Max_{p\%}) \times PV_{ls}) + (Max_{p\%} \times PV_p)$$

where:

- $Max_{p\%}$ is the maximum percentage of lump sum that may be converted to a pension
- PV_{ls} is the present value of the lump sum that would apply if the whole benefit could be, and was, taken as a lump sum, calculated using the method set out in Part 5 of Schedule 2

- PV_p – is the present value of the pension that would apply if the whole benefit could be, and was, taken as a pension, calculated using the method set out in Part 6 of Schedule 2

You know from the trustee that the maximum possible pension that Jason can take is 30% of the value of the lump sum, so

$Max_{p\%}$ = 30%

Hence you need to work out the value of both:

- PV_{ls} and
- PV_p

First work out the value of PV_{ls} using the method set out in Clause 31(2) of Schedule 2, which is

DB x D_{y+m}

where

- DB is the nominal value of the lump sum benefit at the valuation date if the whole benefit was taken as a lump sum. This amount has been provided by the trustee of Jason's superannuation fund and is $100,000.
- D_{y+m} is the discount valuation factor.

Work out the value of D_{y+m} using the method given in Clause 31(3) of Part 5 of Schedule 2:

$$D_{y+m} = \frac{(D_y \times (12 - m)) + (D_{y+1} \times m)}{12}$$

where

y = the number of remaining whole years that Jason has before he reaches minimum deferral age and

m = the number of months, not included in the whole years, that Jason has before he reaches the minimum deferral age

To work out the value of "y" and "m" you need to know when Jason will reach his minimum deferral age and then work out how much time is left between the valuation date and the date when Jason's minimum deferral age is reached.

Jason was born on 23 April 1963. The scheme's minimum deferral age is 55 – so Jason will reach his minimum deferral age on 23 April 2018. The valuation date in this example is 22 November 2006. So:

Remaining term to age 55 as at the valuation date
in complete years (y)   11

Complete months of remaining term not included
in remaining complete years (m)   5

[Remember that if you use another valuation date you will need to adjust the values of 'y' and 'm' in your calculation.]

Now you look at the table in Clause 32 of Part 5, to find the relevant discount valuation factors. As the lump sum increases in line with the Consumer Price Index, the relevant column in the table is the one with the heading 'Lump sum indexed in line with CPI'.

Jason's remaining term to age 55 is between 11 years and 12 years, so the factors that you need are:

$D_y = D_{11} = 0.669$

$D_{y+1} = D_{12} = 0.646$

You now have all the information that you need to calculate D_{y+m}:

$$D_{y+m} = \frac{(D_y \times (12 - m)) + (D_{y+1} \times m)}{12}$$

$$= \frac{(0.669 \times (12\text{-}5) + (0.646 \times 5)}{12}$$

$$= \frac{(0.669 \times 7) + (0.646 \times 5)}{12}$$

$$= \frac{4.683 + 3.230}{12}$$

$$= \frac{7.913}{12}$$

$D_{y+m} = 0.659$

$PV_{ls} = DB \times D_{y+m}$

$= 100{,}000 \times 0.659$

$= \$65{,}900$

Now you need to work out the value of PV_p using the method set out in Clause 34(2) of Schedule 2, and it is

$DBP \times (P_{da} + (R_{sa} \times r)) \times D_{y+m}$

where

- DBP is the annual amount of pension at the valuation date if the pension were to commence on completion of the minimum deferral period;
- P_{da} is the pension valuation factor;
- R_{sa} is the reversion valuation factor that applies to the pension at Jason's age in completed years at the valuation date;
- r is the reversionary percentage; and
- D_{y+m} is the discount valuation factor.

You know the value of DBP and r, as the trustee has given you this information. The value of D_{y+m} has also been calculated already above to be 0.659. But you will need to determine the values of $P_{da},$ R_{sa} and D_{y+m}.

Next you need to work out the pension valuation factor and you need to pick the appropriate table that describes Jason's superannuation interest. The minimum deferral age for Jason's superannuation interest is 55. At the valuation date of 22 November 2006, Jason is 43 years old (and some months but you don't count them for this calculation). From the information that you got from the trustee of the fund you know that:

- there is no guarantee period on the pension; and
- the method of indexation is CPI.

So the table that you need to use for the pension valuation factor and the reversion valuation factor is the one in Clause 7 of Schedule 2, which lists the valuation factors where there is no guarantee period and CPI indexation. From that table you get:

$P_{da} = P_{55} = 15.7468$

$R_{sa} = R_{43} = 2.485$

You know that the reversionary percentage (r) is 60%, from the information that the trustee provided. So you now have all the information needed to calculate PV_p:

$PV_p = DBP \times (P_{da} + (R_{sa} \times r)) \times D_{y+m}$

$\quad = 10,000 \times (15.7468 + (2.485 \times 60\%)) \times 0.659$

$\quad = 10,000 \times (15.7468 + 1.491) \times 0.659$

$\quad = 10,000 \times 17.2378 \times 0.659$

$\quad = 113,597$

So, you have done the calculations that you need to work out the value of Jason's superannuation interest.

$Value = ((1 - Max_{p\%}) \times PV_{ls}) + (Max_{p\%} \times PV_p)$

$\quad = ((1 - 30\%) \times 65,900) + (30\% \times 113,597)$

$\quad = (0.70 \times 65,900) + (0.30 \times 113,597)$

$\quad = 46,130 + 34,079$

$\quad = \$80,209$

Example 9:   Life time pension in the payment phase

Scenario

Kevin and Loredana are separating and want to value Kevin's superannuation interest. Kevin was born on 21 January 1932 and has a superannuation interest that pays a pension for Kevin's life time. Kevin has reached a condition of release and so the interest is in the payment phase.

What valuation method do I use?

The Schedules to the Family Law (Superannuation) Regulations provide a number of different methods for valuing a superannuation interest. You need to select the correct one.

In this case, Schedule 4 provides a method for determining the gross value of a superannuation interest payable as a life pension – which is the case for Kevin's superannuation interest.

Information required to use the valuation method

You will need the following information, which the trustee of Kevin's superannuation fund will provide, to use the valuation method set out in Schedule 4.

The valuation date is the date at which you want the valuation. In this example it is assumed to be 2 February 2003.

Date of birth	21 January 1932
Gender	Male
Current pension (B)	$27,000
Method of indexation	CPI + 1% with a cap of 5%
Reversionary percentage (r)	62.5%
Scheme Retirement Age:	65
Valuation date:	3 February 2003

Calculation of the value

The method for the calculation is given in Clause 2(1) of Schedule 4 and it is:

$B \times (P_{y+m} + (r \times R_{y+m}))$

where

- B is the amount of the annual pension at the valuation date
- P_{y+m} is the pension valuation factor
- R_{y+m} is the reversion valuation factor

You know the value of B and r, as the trustee has given you this information. But you will need to calculate the value of P_{y+m} and R_{y+m}.

So, first work out the value of P_{y+m}, using the method given in Clause 2(2) of Schedule 4, and it is:

$$P_{y+m} = \frac{(P_y \times (12 - m)) + (P_{y+1} \times m)}{12}$$

Where

- P_y is the pension valuation factor that applies to the member's age in completed years at the valuation date
- P_{y+1} is the pension valuation factor that applies to the year after the member's age
- m is the number of completed months that are not included in the member's age at the valuation date

Kevin was born on 21 January 1932 and the valuation date is 3 February 2003. Therefore:

The age at valuation date in completed years (y)   71

Complete months of age not included in the age at valuation date (m)   0

[Remember that if you use another valuation date you will need to adjust the values of 'y' and 'm' in your calculation.]

To find the pension valuation factors, you need to pick the appropriate table that describes Kevin's superannuation interest. From the information that you got from the trustee of the fund you know that the method of indexation of Kevin's pension is CPI =1% with a cap of

5%. So the table you need to use is the one in Clause 7 of Schedule 4, which lists the valuation factors for this type f pension. Using this table, you find that:

$P_y = P_{71} = 10.6597$

$P_{y+1} = P_{72} = 10.2517$

Now you can work out the value of P_{y+m}

$P_{y+m} = \dfrac{(P_y \times (12 - m)) + (P_{y+1} \times m)}{12}$

$\quad = \dfrac{(10.6597 \times (12 - 0)) + (10.2517 \times 0)}{12}$

$\quad = \dfrac{(10.6597 \times 12) + 0}{12}$

$\quad = 10.6597$

Next work our the value of R_{y+m}, using the method given in Clause 2(3) of Schedule 4, and it is:

$R_{y+m} = \dfrac{(R_y \times (12 - m)) + (R_{y+1} \times m)}{12}$

- R_y is the reversion valuation factor that applies to the member's age in completed years at the valuation date
- R_{y+1} is the reversion valuation factor that applies to the year after the member's age
- m is the number of completed months that are not included in the member's age at the valuation date

Again you need to use the table in Clause 7 of Schedule 4, which will give you the following values:

$R_y = R_{71} = 0.5918$

$R_{y+1} = R_{72} = 0.5896$

Now you can work out the value of R_{y+m}

$$R_{y+m} = \frac{(R_y \times (12 - m)) + (R_{y+1} \times m)}{12}$$

$$= \frac{(0.5918 \times (12 - 0)) + (0.5896 \times 0)}{12}$$

$$= \frac{(0.5918 \times 12) + 0}{12}$$

$$= 0.5918$$

Now you have all the information that you need to work out the value of Kevin's superannuation interest:

Value of interest = $B \times (P_{y+m} + (r \times R_{y+m}))$

$$= 27{,}000 \times (10.6597 + (62.5\% \times 0.5918))$$

$$= 27{,}000 \times (10.6597 + (62.5/100 \times 0.5918))$$

$$= 27{,}000 \times (10.6597 + (0.625 \times 0.5918))$$

$$= 27{,}000 \times (10.6597 + 0.3699)$$

$$= 27{,}000 \times 11.0296$$

$$= \$297{,}799$$

Example 10: Fixed-term pension in the payment phase

Scenario

Maurizio and Nina are separating and want to value Nina's superannuation interest. Nina was born on 1 October 1940 and has superannuation interest that pays fixed-term pension. Nina has reached a condition of release and so the interest is in the payment phase.

What valuation method do I use?

The Schedules to the Family Law (Superannuation) Regulations provide a number of different methods for valuing a superannuation interest. You need to select the correct one.

In this case, Schedule 5 provides a method for determining the gross value of a superannuation interest payable as a fixed-term pension – which is the case for Nina's superannuation interest.

Information required to use the valuation method

You will need the following information, which the trustee of Nina's superannuation fund will provide, to use the valuation method set out in Schedule 5.

The valuation date is the date at which you want the valuation. In this example it is assumed to be 28 March 2003.

Date of birth	1 October 1940
Current pension (B)	$19,000
Method of indexation	Average Weekly Earnings (AWE)
Term of pension	payable to age 85
Valuation date	28 March 2003

Calculation of the value

The method for the calculation is given in Clause 2(1) of Schedule 5 and it is:

B x P_{y+m}

where

- B is the amount of the annual pension at the valuation date
- P_{y+m} is the pension valuation factor

You know the value of B, as the trustee has given you this information. But you will need to calculate the value of P_{y+m}.

So, first work out the value of P_{y+m}, using the method given in Clause 2(2) of Schedule 5, and it is:

$$P_{y+m} = \frac{(P_y \times (12 - m)) + (P_{y+1} \times m)}{12}$$

Where

- P_y is the pension valuation factor that applies to the complete years of remaining term of the pension
- P_{y+1} is the pension valuation factor that would apply if the remaining term of the pension was one year more than it actually is
- m is the number of completed months in the remaining term of the pension that are not included in the complete years at the valuation date

Nina was born on 1 October 1940 and the pension is payable to age 85. Therefore, the pension will stop being paid on 1 October 2025. The valuation date is 28 March 2003. Therefore:

Remaining term of the pension in completed years (y)   22

Complete months of remaining term
not included in completed years (m)   6

[Remember that if you use another valuation date you will need to adjust the values of 'y' and 'm' in your calculation.]

Clause 3 of Schedule 5 has a table of pension valuation factors. To find the appropriate pension valuation factors, you need to pick the column in the table that describes Nina's superannuation interest. From the information that you got from the trustee of the fund you

know that the method of indexation of Nina's pension is AWE. So the column that you need is the one headed "wage indexed pension". Using this column, you find that:

$P_y = P_{22} = 17.134$

$P_{y+1} = P_{23} = 17.720$

Now you can work out the value of P_{y+m}

$$P_{y+m} = \frac{(P_y \times (12 - m)) + (P_{y+1} \times m)}{12}$$

$$= \frac{(17.134 \times (12 - 6)) + (17.720 \times 6)}{12}$$

$$= \frac{(17.134 \times 6) + (17.720 \times 6)}{12}$$

$$= \frac{102.804 + 106.32}{12}$$

$$= \frac{209.124}{12}$$

$$= 17.427$$

Now you have all the information that you need to work out the value of Nina's superannuation interest

Value of the interest = $B \times P_{y+m}$

$= 19000 \times 17.427$

$= \$331,113$

Example 11: Fixed-term pension plus future lump sum in the payment phase

Scenario

Oscar and Patrizia are separating and want to value Oscar's superannuation interest. Oscar was born on 16 December 1943 and has superannuation interest that pays a fixed-term pension plus a future lump sum. Oscar has reached a condition of release and so the interest is in the payment phase.

What valuation method do I use?

The Schedules to the Family Law (Superannuation) Regulations provide a number of different methods for valuing a superannuation interest. You need to select the correct one.

In this case, Schedule 6 provides a method for determining the gross value of a superannuation interest payable as a fixed-term pension and a future lump sum – which is the case for Oscar's superannuation interest.

Information required to use the valuation method

You will need the following information, which the trustee of Oscar's superannuation fund will provide, to use the valuation method set out in Schedule 6.

The valuation date is the date at which you want the valuation. In this example it is assumed to be 14 November 2003.

Date of birth	16 December 1943
Current pension (B)	$33,000
Method of indexation of pension	CPI
Term of pension	payable to age 75
Lump sum	Payment of $200,000 at age 75
Method of indexation of lump sum	CPI

Valuation date   14 November 2003

Calculation of the value

The method for the calculation is given in Clause 3(1) of Schedule 6 and it is:

GVP + GVLS

where
- GVP is the gross value of the pension determined using the relevant method of valuation
- GVLS is the gross value of the lump sum

So first you need to work out the gross value of pension. Regulation 42 sets out the a number of methods for determining the gross value of a pension. In Oscar's case, you know that it is a fixed-term pension, and so the appropriate method is the one set out in regulation 42(3). This says that you need to use the method set out in Schedule 5, and it is:

$B \times P_{y+m}$

where

- B is the amount of the annual pension at the valuation date

- P_{y+m} is the pension valuation factor

You know the value of B, as the trustee has given you this information. But you will need to calculate the value of P_{y+m}.

So, first work out the value of P_{y+m}, using the method given in Clause 2(2) of Schedule 5, and it is:

$$P_{y+m} = \frac{(P_y \times (12 - m)) + (P_{y+1} \times m)}{12}$$

Where
- P_y is the pension valuation factor that applies to the complete years of remaining term of the pension
- P_{y+1} is the pension valuation factor that would apply if the remaining term of the pension was one year more than it actually is

- m is the number of completed months in the remaining term of the pension that are not included in the complete years at the valuation date

Oscar was born on 16 December 1943 and the pension is payable to age 75. Therefore, the pension will stop being paid on 16 December 2018. The valuation date is 14 November 2003. Therefore:

Remaining term of the pension in completed years (y)   15

Complete months of remaining term
not included in completed years (m)   1

[Remember that if you use another valuation date you will need to adjust the values of 'y' and 'm' in your calculation.]

Clause 3 of Schedule 5 has a table of pension valuation factors. To find the appropriate discount valuation factors, you need to pick the column in the table that describes Oscar's superannuation interest. From the information that you got from the trustee of the fund you know that the method of indexation of Oscar's pension is CPI. So the column that you need is the one headed "CPI indexed pension". Using this column, you find that:

$P_y = P_{15} = 11.411$

$P_{y+1} = P_{16} = 11.963$

Now you can work out the value of P_{y+m}

$$P_{y+m} = \frac{(P_y \times (12 - m)) + (P_{y+1} \times m)}{12}$$

$$= \frac{(11.411 \times (12 - 1)) + (11.963 \times 1)}{12}$$

$$= \frac{(11.411 \times 11) + 11.963}{12}$$

$$= \frac{125.521 + 11.963}{12}$$

$$= \frac{137.484}{12}$$

$$= 11.457$$

Now you have all the information that you need to work out the gross value of Oscar's pension, and it is:

$$GVP = B \times P_{y+m}$$

$$= 33000 \times 11.457$$

$$= \$378{,}081$$

Next you need to work out the gross value of the lump sum, using the method set out in Clause 3(2) of Schedule 6, and it is

$$LS \times D_{y+m}$$

Where
- LS is the value of the lump sum
- D_{y+m} is the discount valuation factor

You know the value of the lump sum, because the trustee has given it to you. But you need to work out the discount valuation factor, using the method set out in Clause 3(3) of Schedule 6, and it is

$$D_{y+m} = \frac{(D_y \times (12 - m)) + (D_{y+1} \times m)}{12}$$

Where
- D_y is the discount valuation factor that applies to the lump sum and length of time from the valuation date to when it will be paid
- m is the number of complete months of the minimum deferral period that are not included in the remaining complete years of that period
- D_{y+1} is the discount valuation factor that applies to the lump sum at the end of the minimal deferral period plus one year.

You have already worked out that there is 15 years and 1 month remaining in the term of the pension. Since the lump sum will be paid at the time that the pension ends, then this is the information that you need to work out the discount valuation factor.

Clause 4 of Schedule 6 has a table of discount valuation factors. To find the appropriate discount valuation factors, you need to pick the column in the table that describes Oscar's lump sum. From the information that you got from the trustee of the fund you know that the method of indexation of Oscar's lump sum is CPI. So the column that you need is the one headed "CPI indexed pension". Using this column, you find that:

$D_y = D_{15} = 0.587$

$D_{y+1} = D_{16} = 0.570$

Now you have all the information that you need to work out the discount valuation factor, using the following method:

$$D_{y+m} = \frac{(D_y \times (12 - m)) + (D_{y+1} \times m)}{12}$$

$$= \frac{(0.587 \times (12 - 1)) + (0.570 \times 1)}{12}$$

$$= \frac{(0.587 \times 11) + 0.570}{12}$$

$$= \frac{6.457 + 0.570}{12}$$

$$= \frac{7.027}{12}$$

$$= 0.586$$

Now you have all the information that you need to work out the gross value of Oscar's lump sum:

$$GVLS = LS \times D_{y+m}$$

$$= 200000 \times 0.586$$

= $117,200

Finally, you can work out the value of Oscar's superannuation interest:

Value of interest = GVP + GVLS

= $378,081 + $117,200

= $495,281

Example 12: Partially vested accumulation interest in the growth phase

Scenario

Quentin and Rosa are separating and want to value Rosa's superannuation interest. Rosa joined the scheme on 5 June 2000 has a superannuation interest that is a partially vested accumulation interest, with a vesting period of 10 years. This means that if Rosa leaves the scheme before the end of the vesting period she will not receive all the employer contributions credited to her account. Rosa has not reached a condition of release and so the interest is in the growth phase.

What valuation method do I use?

The Schedules to the Family Law (Superannuation) Regulations provide a number of different methods for valuing a superannuation interest. You need to select the correct one.

In this case, Schedule 3 provides a method for determining the gross value of a partially vested accumulation interest in the growth phase – which is the case for Rosa's superannuation interest.

Information required to use the valuation method

You will need the following information, which the trustee of Rosa's superannuation fund will provide, to use the valuation method set out in Schedule 3.

The valuation date is the date at which you want the valuation. In this example it is assumed to be 1 September 2003.

Date joined the scheme	5 June 1999
Vested benefit at the valuation date (V)	$11,200
Total account balance at the valuation date (A)	$15,600
Vesting period	10 years

Valuation date   1 September 2003

Calculation of the value

The method for the calculation is given in Clause 2(1) of Schedule 3 and it is:

$V + ((A - V) \times f_{y+m})$

where

- V is the value of the vested benefit at the valuation date
- A is the amount to which Rosa would be entitled if the interest were fully, rather than partially, vested
- f_{y+m} is the vesting factor

You know what V and A are, as the trustee gave you that information. So you need to work out the value of f_{y+m}, using the method set out in Clause 2(2) of Schedule 3, and it is:

$$f_{y+m} = \frac{(f_y \times (12 - m)) + (f_{y+1} \times m)}{12}$$

where

- y is the length of time, in whole years, that Rosa has been a member of the scheme; and
- m is the number of complete months, not included in the whole years, that Rosa has been a member of the scheme

Rosa joined the scheme on 5 June 2000 and the valuation date is 1 September 2003. So:

Membership period in complete years (y)   3

Complete months of membership not included
in complete years (m)   2

[Remember that if you use another valuation date you will need to adjust the values of 'y' and 'm' in your calculation.]

Clause 4 of Schedule 3 has a table of vesting factors. To find the appropriate vesting factors, you need to pick the column in the table that describes Rosa's superannuation interest. From the information that you got from the trustee of the fund you know that the

there is a 10 year vesting period. So the column that you need is the one headed "10 year vesting period". Using this column, you find that:

$f_y = f_3 = 0.75$

$f_{y+1} = f_4 = 0.79$

Now you can work out the value of f_{y+m}

$$f_{y+m} = \frac{(f_y \times (12 - m)) + (f_{y+1} \times m)}{12}$$

$$= \frac{(0.75 \times (12 - 2)) + (0.79 \times 2)}{12}$$

$$= \frac{(0.75 \times 10) + (0.79 \times 2)}{12}$$

$$= \frac{7.5 + 1.58}{12}$$

$$= \frac{9.08}{12}$$

$$= 0.757$$

Now you have all the information that you need to calculate the value of Rosa's superannuation interest, and it is:

Value of interest $= V + ((A - V) \times f_{y+m})$

$= 11,200 + ((15,600 - 11,200) \times 0.757)$

$= 11,200 + (4,400 \times 0.757)$

$= 11,200 + 3330.8$

$= \$14,531$

Example 13:   Partially vested accumulation interest in the growth phase

Scenario

In November 2003, Septimus and Titania decide that they want to do a property settlement. Septimus and Titania separated on 2 March 2003 and want to value Septimus' superannuation interest as at that date. Septimus, who joined the scheme on 29 November 2001, has a superannuation interest that is a partially vested accumulation interest, with a vesting period of 5 years. This means that if Septimus leaves the scheme before the end of the vesting period he will not receive all the employer contributions credited to his account. Septimus has not reached a condition of release and so the interest is in the growth phase.

What valuation method do I use?

The Schedules to the Family Law (Superannuation) Regulations provide a number of different methods for valuing a superannuation interest. You need to select the correct one.

In this case, Schedule 3 provides a method for determining the gross value of a partially vested accumulation interest in the growth phase – which is the case for Septimus' superannuation interest.

Information required to use the valuation method

You will need the following information, which the trustee of Septimus' superannuation fund will provide, to use the valuation method set out in Schedule 3.

The valuation date is the date at which you want the valuation. In this example it is assumed to be the date that Septimus and Titania separated, which is 2 March 2003.

Date joined the scheme	29 November 2001
Date of first member information statement	30 June 2002
Vested benefit at that date (V1)	$3,670
Total account balance at that date (A1)	$7,130

Date of second member information statement	30 June 2003
Vested benefit at that date (V2)	$12,780
Total account balance at that date (A2)	$20,470
Vesting period	5 years
Valuation date	2 March 2003

Calculation of the value

The method for the calculation is given in Clause 2(1) of Schedule 3 and it is:

$V + ((A - V) \times f_{y+m})$

where

- V is the value of the vested benefit at the valuation date
- A is the amount to which Septimus would be entitled if the interest were fully, rather than partially, vested
- f_{y+m} is the vesting factor

Because the valuation date is between two member information statements, you need to work out the value of both V and A, using the information in those two statements.

First work out the value of V, using the method set out in Clause 3(3) of Schedule 3, and it is:

$V1 + \dfrac{(V2 - V1) \times X}{D}$

where

- V1 is the value of the vested benefit given on the first member information statement
- V2 is the value of the vested benefit given on the second member information statement
- X is the number of days from the date of the first statement date and the valuation date
- D is the number of days from the first statement date and the second statement date

You know the dates of the first statement, valuation and the second statement. So you can work out that:

Number of days from the first statement date to the valuation date (X)   244

Number of days from the first statement date to the second statement date (D)   365

Now you have all the information that you need to work out the value of V:

$$V = V1 + \frac{(V2 - V1) \times X}{D}$$

$$= 3{,}670 + \frac{(12{,}780 - 3{,}670) \times 244}{365}$$

$$= 3{,}670 + \frac{9{,}110 \times 244}{365}$$

$$= 3{,}670 + \frac{2{,}222{,}840}{365}$$

$$= 3{,}670 + 6{,}090$$

$$= \$9{,}760$$

Next work out the value of A, using the method set out in Clause 3A(3) of Schedule 3, and it is:

$$A1 + \frac{(A2 - A1) \times X}{D}$$

where
- A1 is the value of the total account balance given on the first member information statement
- A2 is the value of the total account balance given on the second member information statement
- X is the number of days from the date of the first statement date and the valuation date
- D is the number of days from the first statement date and the second statement date

You have already worked out the value of X and D, so you have all the information that you need to work out the value of A:

$$A = A1 + \frac{(A2 - A1) \times X}{D}$$

$$= 7{,}130 + \frac{(20{,}470 - 7{,}130) \times 244}{365}$$

$$= 7{,}130 + \frac{13{,}340 \times 244}{365}$$

$$= 7{,}130 + \frac{3{,}254{,}960}{365}$$

$$= 7{,}130 + 8{,}918$$

$$= \$16{,}048$$

Next you need to work out the value of f_{y+m}, using the method set out in Clause 2(2) of Schedule 3, and it is:

$$f_{y+m} = \frac{(f_y \times (12 - m)) + (f_{y+1} \times m)}{12}$$

where

- y is the length of time, in whole years, that Septimus has been a member of the scheme; and
- m is the number of complete months, not included in the whole years, that Septimus has been a member of the scheme

Septimus joined the scheme on 29 November 2001 and the valuation date is 2 March 2003. So:

Membership period in complete years (y)	1
Complete months of membership not included in complete years (m)	3

[Remember that if you use another valuation date you will need to adjust the values of 'y' and 'm' in your calculation.]

Clause 4 of Schedule 3 has a table of vesting factors. To find the appropriate vesting factors, you need to pick the column in the table that describes Septimus' superannuation interest. From the information that you got from the trustee of the fund you know that the there is a 5 year vesting period. So the column that you need is the one headed "5 year vesting period". Using this column, you find that:

$f_y = f_1 = 0.77$

$f_{y+1} = f_2 = 0.83$

Now you can work out the value of f_{y+m}

$$f_{y+m} = \frac{(f_y \times (12 - m)) + (f_{y+1} \times m)}{12}$$

$$= \frac{(0.77 \times (12 - 3)) + (0.83 \times 3)}{12}$$

$$= \frac{(0.77 \times 9) + (0.83 \times 3)}{12}$$

$$= \frac{6.93 + 2.49}{12}$$

$$= \frac{9.42}{12}$$

$$= 0.785$$

Now you have all the information that you need to calculate the value of Septimus' superannuation interest, and it is:

Value of interest = $V + ((A - V) \times f_{y+m})$

$$= 9,760 + ((16,048 - 9,760) \times 0.785)$$

$$= 9,760 + (6,288 \times 0.785)$$

= 9,760 + 4,936

= $14,696