



## CASE STUDY FAMILY DECISIONS

**KNOWLEDGE EXPECTED OF: CFP® Professionals Only**

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### Retirement

Patricia, the superintendent of a local school board, will retire at the end of this school year when she turns 55. Her husband Tom plans to continue working for the next five years until he turns 65. The couple doesn't expect to draw income on their assets while Tom is still working.

Once Tom retires, the couple estimates they will need \$10,000 per month (before taxes, in today's dollars) in addition to their full Canada Pension Plan (CPP) retirement and Old Age Security (OAS) pensions for the remainder of Tom's projected lifetime of 100 years. Thereafter, expenses would be expected to drop to \$5,000 per month (before taxes, in today's dollars) for the remainder of Patricia's life. Patricia and Tom own their home, estimated to be worth \$800,000. By the time Tom is 80, they may want to sell it and move into a retirement residence. They would expect \$1 million in net proceeds from the sale of their home at that time.

Tom has a federally regulated Locked-In Retirement Account (LIRA) valued at \$98,000 and a Registered Retirement Savings Plan (RRSP) worth \$600,000. He plans to continue contributing \$20,000 to his RRSP annually until he retires. The couple has a conservative investor profile, which translates into 70 percent of their investments in fixed income and 30 percent in equities. Their advisor charges one percent of assets under management annually.

Starting next year, Patricia's defined benefit pension plan will provide a monthly benefit of \$4,000, indexed to inflation. The couple is debt-free and has \$15,000 set aside for emergencies. Based on a previous cash flow analysis, they expect to have \$500 in surplus cash flow going forward until Tom retires. Tom expects to remain in the same tax bracket once he retires, while Patricia expects to be in a lower tax bracket once she begins receiving her pension. The couple would like some assurance that they are on track to meeting their retirement income goals.

### Son's Home Purchase

Patricia and Tom have a 26-year-old son, Malcolm, who would like to buy a condominium and move out of his parents' house. Since he has graduated and has no plans to attend school further, the couple wonder if the \$7,000 remaining in the Registered Education Savings Plan (RESP) they set up for him 20 years ago can be used toward the condominium's down payment. Tom would also like to know if he can withdraw \$20,000 from his RRSP under the Home Buyers' Plan (HBP) and use it toward the down payment, or if they would be better off borrowing from their line of credit at an interest rate of five percent for five years.

After expenses, Malcolm's Disability Tax Credit (DTC), provincial disability supplement and earnings from employment are expected to provide \$500 in excess cash flow each month. His parents have encouraged him to start saving for retirement, planned to start at age 65. He is self-sufficient and expects that his lifestyle in retirement will be similar to his lifestyle today. Malcolm expects to need \$35,000 per year (before taxes, in today's dollars) in addition to his CPP retirement and OAS pensions. He has a balanced investor profile, which means that his fixed income and equity investments are of equal weight. Investing with his parents' advisor will result in a one percent fee on his investments. Malcolm's disability does not alter his life expectancy.

## Mother's Retirement Income Needs

Patricia's mother Gladys is 80 years old and recently widowed. She is in the process of settling the estate of her deceased husband. When he died, he left a qualified Registered Retirement Income Fund (RRIF) and a deposit Tax-Free Savings Account (TFSA) valued at \$80,000 and \$60,000, respectively. Since then, each has accumulated unrealized capital gains of \$4,000 and \$6,000, respectively. Gladys was named successor annuitant of the RRIF and beneficiary of the TFSA. Gladys, who also owns a qualifying spousal RRIF worth \$75,000, has been involved in managing her investments since her husband's death.

She is healthy and active. However, since the death of her husband, Gladys has thought about moving to a retirement residence at a cost of \$4,300 per month (after taxes, adjusted for inflation). These costs are over and above her government benefits. Her greatest concern is outliving her money. Gladys is also adamant about leaving as large an estate as possible for Malcolm upon her death.

The sale of her home would produce net proceeds of \$630,000, which Gladys could use to purchase a prescribed single life annuity that provides \$4,317.27 per month, or \$4,035.96 per month guaranteed for 10 years. Alternatively, she may invest the proceeds in a portfolio with the same asset allocation as her RRIF, which comprises 25 percent cash, 65 percent fixed income and 10 percent equities. There is no cost to hold cash in her portfolio. Her mutual funds, however, carry a fee of 1.5 percent annually for fixed income funds and 2.25 percent annually for equity funds. She may also convert her RRIF to an annuity that provides \$1,304.25 per month or \$1,128.84 per month with a 10-year guarantee. Gladys expects to be in a 20 percent tax bracket, which would result in five percent of any non-registered annuity or investment payment being payable in tax. Gladys and Patricia want to know how annuities can help Gladys meet her goals.

## Knowledge Expectations – Financial Analysis for Tom and Patricia

The CFP professional should be able to:

- Construct a current net worth statement for Patricia and Tom.

### Personal Net Worth for Patricia and Tom

	Patricia	Tom	Joint	Total
House	\$-	\$-	\$800,000	\$800,000
<b>Total Lifestyle Assets</b>	<b>\$-</b>	<b>\$-</b>	<b>\$800,000</b>	<b>\$800,000</b>
Emergency Fund	\$-	\$15,000	\$-	\$15,000
Locked-in Retirement Account (LIRA)	\$-	\$600,000	\$-	\$600,000
Locked-in Retirement Account (LIRA)		\$98,000		\$98,000
<b>Total Investable Assets</b>	<b>\$-</b>	<b>\$713,000</b>	<b>\$-</b>	<b>\$713,000</b>
				\$-
<b>Total Assets</b>	<b>\$-</b>	<b>\$713,000</b>	<b>\$800,000</b>	<b>\$1,513,000</b>
<b>Total Liabilities</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>	<b>\$-</b>
<b>Net Worth</b>	<b>\$-</b>	<b>\$713,000</b>	<b>\$800,000</b>	<b>\$1,513,000</b>

- The couple has a positive financial position with no debt and liquid assets in the event of emergencies.

### Knowledge Expectations – Retirement Planning for Tom and Patricia

The CFP professional should be able to:

- Identify that the couple has five more years to save for retirement.
- Identify that Tom and Patricia, 60 and 55 respectively, should plan to live to 100, based on the most conservative life expectancies provided in the *Projection Assumption Guidelines*<sup>1</sup>.
- Calculate that the couple may expect to earn an annual rate of return of 4.62 percent<sup>2</sup> on any investments, based on the return assumptions provided in the *Projection Assumption Guidelines*.
- Calculate that the couple may expect to earn a net rate of return of 3.62 percent<sup>3</sup> after fees.
- Identify that the couple will need \$10,000 per month (before taxes) over a 35-year<sup>4</sup> time horizon.
- Calculate that the couple will need to draw \$6,000<sup>5</sup> per month from their investments to meet their expected retirement needs until Tom turns 100.
- Calculate that the couple will need \$1,811,250.93<sup>6</sup> when Tom turns 65 to cover their retirement income needs until he turns 100.
- Identify that Patricia will need \$5,000 per month before taxes for an additional five years<sup>7</sup> after Tom's death.
- Calculate that Patricia will need to draw \$1,000<sup>8</sup> per month from her investments to meet her retirement needs from age 95 to 100.
- Calculate that Patricia will require \$57,052.36<sup>9</sup> when she turns 95 to meet her retirement needs until she turns 100.
- Calculate that the couple will require \$16,434.18<sup>10</sup> when Patricia turns 60 so that it may grow to \$57,052.36 by Patricia's 95<sup>th</sup> birthday.
- Calculate that the couple will require \$1,827,685.11<sup>11</sup> when Tom turns 65, and Patricia is 60, to meet their total retirement needs.
- Calculate that the couple may expect their current retirement portfolio to grow to \$941,328.89<sup>12</sup> by Tom's 65<sup>th</sup> birthday.

<sup>1</sup> This case study reflects Projection Assumption Guidelines published in 2015

<sup>2</sup> Expected Gross Rate of Return = 3.9% (0.70) + 6.3% (0.3) = 4.62%

<sup>3</sup> Expected Net Rate of Return = 4.62% - 1.00% = 3.62%

<sup>4</sup> Tom: Age 100 – 65 = 35 years

<sup>5</sup> \$10,000 - \$4,000 = \$6,000

<sup>6</sup> N = 35 (12) = 420; I/Y = 2%; PMT = \$10,000 - \$4,000 = \$6,000; FV = \$0. CPT PV = \$1,811,250.93

<sup>7</sup> Patricia: Age 100 – 95 = 5 years

<sup>8</sup> \$5,000 - \$4,000 = \$1,000

<sup>9</sup> N = 60; I/Y = 2%; PMT = \$5,000 - \$1,000 = \$4,000; FV = \$0. CPT PV = \$57,052.36

<sup>10</sup> N = 35; I/Y = 3.62%; PMT = 14,000 = \$41,000; FV = \$57,052.36. CPT PV = \$16,434.18

<sup>11</sup> \$1,811,250.93 + \$16,434.18 = \$1,827,685.11

<sup>12</sup> N = 5; I/Y = 3.62%; PV = \$698,000; PMT = \$20,000. CPT FV = \$941,328.89

- Identify that the couple will need to use the proceeds from the sale of their home to fund a portion of their retirement.<sup>13</sup>
- Calculate that the couple will require \$932,388.33 when Tom turns 65 to fund a monthly income of \$6,000 until his 80<sup>th</sup> birthday.
- Identify that the couple should have enough funds to cover their retirement income needs for Tom's first 15 years of retirement, until he turns 80 and Patricia turns 75.
- Calculate that, if the couple can net \$1 million from the sale of their home when Tom turns 80, they may expect that the proceeds from the house will provide them with a monthly income of \$5,861.45<sup>14</sup> until Tom turns 100.
- Calculate that the couple would have to net \$1,023,637.55<sup>15</sup> from the sale of their home to provide an income of \$6,000 per month until Tom turns 100.
- Calculate that the couple may need to save an additional \$23,637.55<sup>16</sup> by Tom's 80<sup>th</sup> birthday to provide a monthly income of \$6,000 until he turns 100.
- Identify that because the couple will not be saving once they begin drawing income. they will need to save \$13,865.92<sup>17</sup> by the start of Tom's retirement at 65 so that those assets may grow to \$23,637.55 by his 80<sup>th</sup> birthday.
- Calculate that saving \$13,865.92 over the next five years will require the couple to save \$211.16<sup>18</sup> per month.
- Calculate that the couple may need to save \$250.27<sup>19</sup> per month over the next five years to fund Patricia's retirement needs between her 95<sup>th</sup> and 100<sup>th</sup> birthday.
- Calculate that the couple needs to save \$461.43<sup>20</sup> per month over the next five years to fund their retirement income needs fully until Patricia turns 100.
- Identify that the couple has sufficient cash flow to meet their retirement income needs.<sup>21</sup>
- Identify that, based on Tom's age, he may unlock up to one-half of the assets in his Locked-In Retirement Account (LIRA).
- Explain that Tom can unlock up to one-half of the assets in his LIRA by completing appropriate paperwork from the Office of the Superintendent of Financial Institutions (OSFI). Direct Tom to the OSFI website to complete the application.

<sup>13</sup> \$1,827,685.11 needed to fund retirement > \$941,328.89 available to fund retirement

<sup>14</sup> N = 20 X 12 = 240; I/Y = 3.62%; PV = \$1,000,000; FV = \$0. CPT PMT \$5,861.45

<sup>15</sup> N = 240; I/Y = 3.62%; PMT = -\$6,000; FV = \$0. CPT PV = \$1,023,637.55

<sup>16</sup> \$1,023,637.55 - \$1,000,000 = \$23,637.55

<sup>17</sup> N = 15; I/Y = 3.62%; PMT = \$0; FV = \$0. CPT PV = \$13,865.92

<sup>18</sup> N = 5 x 12 = 60; I/Y = 3.62%; PV = \$0; FV = \$13,865.92. CPT PMT = \$211.16

<sup>19</sup> N = 5 x 12 = 60; I/Y = 3.62%; PV = 0; FV = 16,434.18. CPT PMT = \$250.27

<sup>20</sup> \$211.16 + \$250.27 = \$461.43

<sup>21</sup> Need \$461.43 per month to meet retirement income need. Have \$500.00 available free cash flow per month.

- Explain that, once approved by OSFI, Tom may transfer the assets in his LIRA to a Restricted Life Income Fund (RLIF). He may subsequently transfer up to one-half of the assets in the RLIF to his RRSP. This would unlock the funds and provide him with more flexibility than the RLIF, which has an annual maximum withdrawal limit. Also explain that Tom must process this transfer within 60 days of establishing his RLIF.
- Explain that, while Tom can choose to unlock his LIRA when he retires, he may consider doing it now to avoid potential changes to the unlocking rules in the future, which may reduce its benefits. If Tom chooses to proceed now, he may transfer the remaining assets in his RLIF to a Restricted Locked-In Savings Plan (RLSP) to benefit from tax-deferred growth in the account until he turns 72.<sup>22</sup>
- Explain that once Tom retires and requires an income stream, he may choose to withdraw funds from either or both of his plans (RRSP and RLSP). To facilitate the income stream, he may transfer the assets from his RRSP to a Registered Retirement Income Fund (RRIF). Alternatively, he may use the funds to purchase a life annuity or a term certain annuity until his 90<sup>th</sup> birthday. Similarly, he may transfer the assets from his RLSP to an RLIF or life annuity.
- Explain that the transfer of assets from his RRSP to an RRIF, and from an RLSP to an RLIF, must take place by the end of the year in which Tom turns 71.
- Identify that the \$6,000 monthly withdrawal from Tom's retirement assets will be combined with the couple's CPP retirement and OAS pensions to meet their retirement income needs.
- Identify that Tom currently contributes \$20,000 to his RRSP.
- Evaluate the factors Tom may consider when deciding whether to continue contributing to his RRSP or start contributing to a TFSA:
  - Tax Impact: Explain that Tom may benefit from a tax deduction each year he maintains his RRSP contribution. However, the tax-deferred growth will be limited to five years until retirement.
  - Flexibility or liquidity required: Explain that since Tom does not expect to draw down on his assets for at least the next five years, he may be indifferent to the RRSP and TFSA options.
  - Impact on government benefits: Explain that maintaining Tom's RRSP contributions may impact his OAS benefits by increasing his taxable income in retirement. He may consider contributing to a TFSA to benefit from lower taxable income in retirement and reduction of the OAS clawback.
- Explain that, based on the factors listed above, Tom may benefit from switching his \$20,000 RRSP contribution to a TFSA contribution.
- Explain that the pension income that Patricia will begin receiving at the end of this school year will qualify for the pension income amount on this year's income tax return.

### Knowledge Expectations – Financial Analysis for Gladys

The CFP professional should be able to:

- Construct a current net worth for Gladys

<sup>22</sup> Tom must transfer the assets in his RLSP to an RLIF by the end of the year in which he turns 71. The first mandatory withdrawal must be processed by the end of the year following the year in which it was established. Tom could postpone the withdrawal and defer the tax impact until December 31<sup>st</sup> of the year after he establishes the RLIF. He would be 72 at this time.

**Personal Net Worth  
for Gladys**

House	\$630,000
<b>Total Lifestyle Assets</b>	<b>\$630,000</b>
Registered Retirement Income Fund (RRIF) - Gladys	\$75,000
Registered Retirement Income Fund (RRIF) - Husband	\$84,000
Tax-Free Savings Account (TFSA)	\$66,000
<b>Total Investable Assets</b>	<b>\$225,000</b>
<b>Total Assets</b>	<b>\$855,000</b>
<b>Total Liabilities</b>	<b>\$-</b>
<b>Net Worth</b>	<b>\$855,000</b>

- Gladys’s positive net worth provides her with a large asset base to fund her retirement income needs.

**Knowledge Expectations –Estate Planning Following Death of Gladys’s Husband**

The CFP professional should be able to:

- Explain that, as the successor annuitant to her late husband’s RRIF, Gladys may take over the ownership of the assets with no immediate tax liability by transferring them to an RRIF in her name. She may choose to consolidate the assets into her spousal RRSP.
- Explain that, as the beneficiary of her late husband’s TFSA, Gladys is entitled to receive all of the assets in the account. The \$6,000 unrealized capital gain earned since her husband’s death will be included in Gladys’s income for the year in which the transfer of the assets takes place. The resulting tax liability is estimated to be \$600,<sup>23</sup> based on the capital gains inclusion rate of 50 percent and her 20 percent tax rate.
- Explain that, as the spouse of a deceased TFSA holder, Gladys may deposit the full balance she receives from her husband’s account to a TFSA in her name. Gladys must designate the deposit with the Canada Revenue Agency (CRA) as an exempt contribution within 30 days of receiving the funds. This will ensure that the contribution is not counted against her individual TFSA contribution room nor classed as an excess amount, which would result in a penalty tax.

**Knowledge Expectations – Retirement Income Planning for Gladys**

The CFP professional should be able to:

- Identify that based on the most conservative life expectancies provided in the *Projection Assumption Guidelines*, 80-year-old Gladys is likely to require an income until she turns 100.

<sup>23</sup> \$6,000 (0.50) (0.20) = \$600

- Calculate that the cost of providing Gladys with \$4,300 per month, adjusted for inflation, amounts to \$849,998.35.<sup>24</sup>
- Calculate that Gladys has \$225,000<sup>25</sup> in investable assets that may be used to fund her retirement income needs.
- Identify that Gladys will need to sell her house to fund her retirement as she does not have sufficient funds to meet her retirement income needs at present.<sup>26</sup>
- Calculate that Gladys may expect to earn a gross annual rate of return of 3.89 percent<sup>27</sup> on her portfolio, based on the *Projection Assumption Guidelines*.
- Calculate that, after fees, Gladys may expect to earn a net rate of return of 2.69 percent.<sup>28</sup>
- Calculate that the estimated after-tax monthly income that Gladys may receive, if she invests the proceeds from the sale of her house, is \$3,227.16.<sup>29</sup> This is equivalent to the present value of 598,500.31.<sup>30</sup>
- Calculate that the estimated monthly income after taxes that Gladys may receive from a non-registered, prescribed life annuity is \$4,101.41.<sup>31</sup> This is equivalent to the present value of \$760,636.34.<sup>32</sup>
- Calculate that the estimated monthly income after taxes that Gladys may receive from a non-registered, prescribed life annuity with a 10-year guarantee period is \$3,834.16.<sup>33</sup> This is equivalent to the present value of \$711,072.88.<sup>34</sup>
- Calculate that the estimated monthly income after taxes that Gladys may receive from her TFSA is \$355.88.<sup>35</sup> This is equivalent to the present value of \$66,000.00.
- Calculate that the estimated monthly income after taxes that Gladys may receive from her RRIF is \$693.74.<sup>36</sup> This is equivalent to the present value of \$127,199.58.<sup>37</sup>
- Calculate that the estimated monthly income after taxes that Gladys may receive from a registered life annuity (based on a transfer from her RRIF) is \$1,043.39.<sup>38</sup> This is equivalent to the present value of \$193,540.27.<sup>39</sup>

<sup>24</sup>  $N = 20 \times 12 = 240$ ;  $I/Y = 2\%$ ;  $PMT = \$4,300$ ;  $FV = \$0$ . CPT  $PV = \$849,998.35$

<sup>25</sup>  $\$75,000 + \$84,000 + \$66,000 = \$225,000$

<sup>26</sup>  $\$849,998.35$  needed to fund retirement >  $\$225,000$  available to fund retirement

<sup>27</sup> Expected gross rate of return =  $2.9\% (0.25) + 3.9\% (0.65) + 6.3\% (0.1) = 3.89\%$

<sup>28</sup> Expected net rate of return =  $3.89\% - 0 (0.25) - 0.65 (1.50) - 0.10 (2.25) = 2.69\%$

<sup>29</sup>  $N = 20 \times 12 = 240$ ;  $I/Y = 2.69\%$ ;  $PV = \$630,000$ ;  $FV = 0$ . CPT  $PMT = \$3,397.01$

$\$3,397.01 - \$3,397.01 (0.05) = \$3,227.16$

<sup>30</sup>  $N = 20 \times 12 = 240$ ;  $I/Y = 2.69\%$ ;  $PMT = \$3,227.16$ ;  $FV = 0$ . CPT  $PV = \$598,500.31$

<sup>31</sup>  $\$4,317.27 - \$4,317.27 (0.05) = \$4,101.41$

<sup>32</sup>  $N = 20 \times 12 = 240$ ;  $I/Y = 2.69\%$ ;  $PMT = \$4,101.41$ ;  $FV = 0$ . CPT  $PV = \$760,636.34$

<sup>33</sup>  $\$4,035.96 - \$4,035.96 (0.05) = \$3,834.16$

<sup>34</sup>  $N = 20 \times 12 = 240$ ;  $I/Y = 2.69\%$ ;  $PMT = \$3,834.16$ ;  $FV = 0$ . CPT  $PV = \$711,072.88$

<sup>35</sup>  $N = 20 \times 12 = 240$ ;  $I/Y = 2.69\%$ ;  $PV = \$66,000$ ;  $FV = 0$ . CPT  $PMT = \$355.88$

<sup>36</sup>  $N = 20 \times 12 = 240$ ;  $I/Y = 2.69\%$ ;  $PV = \$159,000$ ;  $FV = 0$ . CPT  $PMT = \$857.34$

$\$857.34 - \$857.34 (0.20) = \$685.87$

<sup>37</sup>  $N = 20 \times 12 = 240$ ;  $I/Y = 2.69\%$ ;  $PMT = \$685.87$ ;  $FV = 0$ . CPT  $PV = \$127,199.58$

<sup>38</sup>  $\$1,304.25 - \$1,304.25 (0.20) = \$1,043.39$

<sup>39</sup>  $N = 20 \times 12 = 240$ ;  $I/Y = 2.69\%$ ;  $PMT = \$1,043.39$ ;  $FV = 0$ . CPT  $PV = \$193,540.27$

## CASE STUDY – FAMILY DECISIONS

- Calculate that the estimated monthly income after taxes that Gladys may receive from a registered life annuity with a 10-year guarantee (based on a transfer from her RRIF) is \$903.07.<sup>40</sup> This is equivalent to the present value of \$167,480.90.<sup>41</sup>
- Identify that Gladys's primary concern is having enough income to cover her retirement needs.
- Identify that if Gladys invests the proceeds from the sale of her home, her TFSA and her RRIF in a portfolio comprising 25 percent cash, 65 percent fixed income and 10 percent equities, she may not meet her retirement income needs.<sup>42</sup>
- Explain that Gladys may consider purchasing an annuity because investing alone will not allow her to meet her retirement income needs.
- Evaluate the factors Gladys may consider when choosing to purchase an annuity versus investing her assets.
  - Income requirement: Gladys may benefit from purchasing an annuity because investments alone will not help her meet her retirement income needs.
  - Risk tolerance: Explain that, since Gladys has a low risk tolerance, a life annuity may be a suitable protection against outliving her money by providing a guaranteed income stream.
  - Control over investments: Explain that an annuity will remove Gladys's control over investment decision-making, in which she has been actively involved since her husband's death.
  - Control over timing of receiving income: An annuity may be a more suitable solution for Gladys because it would ensure a predictable monthly income stream to cover her expenses.
  - Life expectancy: Gladys may be expected to live to 100. Explain that an annuity will protect against outliving her savings.
  - Estate planning objectives: Purchasing an annuity may reduce the value of Gladys's estate. However, purchasing an annuity with a guarantee period may provide some estate benefits.
- Explain that based on the factors listed above, Gladys may benefit from purchasing a life annuity with a portion of her assets because it will provide her with a predictable income stream for the remainder of her life.
- Identify that choosing the features of a life annuity will enable Gladys to pursue her secondary goal of leaving as large an estate as possible for Malcolm.
- Explain that using non-registered funds to purchase an annuity will enable Gladys to have a lower taxable income now, but that doing so may result in Malcolm receiving a smaller estate upon her death. This may happen due to higher taxes payable as a result of the remaining RRIF assets being included in her income in the year of death. With this in mind, a registered annuity may be a more suitable option.
- Explain that a higher income is available for an annuity without a guarantee period, but that Gladys may consider purchasing an annuity with a guarantee period to maximize the estate she can bequest to Malcolm.
- Explain that, based on the factors listed above, the optimal solution for Gladys may be to use the proceeds from her RRIF to purchase a life annuity with a 10-year guarantee period, while investing the proceeds from the sale of her home and her TFSA in a portfolio weighted 25 percent cash, 65 percent fixed income and 10 percent equities. Doing so, however, may leave her short of income in her final years.<sup>43</sup>

<sup>40</sup>  $\$1,128.84 - \$1,128.84 (0.20) = \$903.07$

<sup>41</sup>  $N = 20 \times 12 = 240$ ;  $I/Y = 2.815\%$ ;  $PMT = \$903.07$ ;  $FV = 0$ .  $CPT PV = \$167,480.90$

<sup>42</sup>  $(\$598,500.31 + \$66,000 + \$127,199.58) < \$849,998.35$  required to fund retirement

<sup>43</sup>  $\$598,500.31 + \$66,000 + 167,480.90 < \$849,998.35$  required to fund retirement



- Explain that the next best alternative should enable Gladys to meet her retirement needs while maximizing the estate she wants to leave to Malcolm. This would require her to use the proceeds from her RRIF to purchase a life annuity without a guarantee period, and invest the proceeds from the sale of her home and her TFSA in a portfolio weighted 25 percent cash, 65 percent fixed income and 10 percent equities.<sup>44</sup>

### Knowledge Expectations – Financial Analysis for Gladys

The CFP professional should be able to:

- Construct a projected cash flow statement for Gladys.

#### Projected Cash Flow for Gladys

	Monthly	Annual
Non-Registered Income	\$3,397.01	\$40,764.12
Tax-Free Savings Account (TFSA) Income	\$355.88	\$4,270.56
Registered Retirement Income Fund (RRIF) Annuity	\$1,304.25	\$15,651.00
Taxes	-\$430.70	-\$5,168.40
<b>Net Income</b>	<b>\$4,626.44</b>	<b>\$55,517.28</b>
<b>Total Cash Inflows</b>	<b>\$4,626.44</b>	<b>\$55,517.28</b>
Retirement Facility Expenses	\$4,300.00	\$51,600.00
<b>Total Expenses</b>	<b>-\$4,300.00</b>	<b>-\$51,600.00</b>
<b>Total Cash Outflows</b>	<b>-\$4,300.00</b>	<b>-\$51,600.00</b>
<b>Net Cash Flow</b>	<b>\$326.44</b>	<b>\$3,917.28</b>

### Knowledge Expectations – Estate Planning for Gladys

The CFP professional should be able to:

- Explain that Gladys should update her will to include Malcolm as the beneficiary of her estate.
- Explain that Gladys should update the beneficiary designation to include Malcolm on her RRIF, TFSA and the life annuity<sup>45</sup> she purchases, to ensure that any remaining assets are transferred to him upon her death.

<sup>44</sup> \$598,500.31 + \$66,000 + 193,540.27 > \$849,998.35 required to fund retirement

<sup>45</sup> A life annuity<sup>45</sup> without a guarantee period may still have a beneficiary named to receive a payout if Gladys dies before receiving the first payment.

### Knowledge Expectations – Disability, Savings, Planning and Retirement for Malcolm

The CFP professional should be able to:

- Identify that, based on the *Projection Assumption Guidelines*, Malcolm has a 25 percent chance of outliving his capital if he lives to his 90<sup>th</sup> birthday. He may wish to revisit this risk in the future to ensure he remains comfortable with 90 years of age for life expectancy.
- Calculate that he may expect to earn an annual rate of return of 5.1 percent<sup>46</sup> on any investments based on the return assumptions provided in the *Projection Assumption Guidelines*.
- Calculate that, after fees, Malcolm may expect to earn a net rate of return of 4.1 percent.<sup>47</sup>
- Identify that Malcolm will need \$35,000 per year (in today's dollars) over a 25-year<sup>48</sup> time horizon.
- Identify that \$35,000 in today's dollars is equivalent to \$75,766.07<sup>49</sup> when Malcolm turns 65.
- Calculate that providing Malcolm with an annual income of \$35,000, indexed to inflation, from age 65 to 90 will cost \$1,479,215.51.<sup>50</sup>
- Calculate that Malcolm will need \$1,171,211.60<sup>51</sup> at age 65 to be able to draw \$35,000 of income before taxes, indexed to inflation, until he turns 90.
- Calculate that Malcolm needs to save \$1,017.03<sup>52</sup> per month until he turns 65 to fund his retirement income needs.
- Identify that as a recipient of the DTC, Malcolm may qualify to open a Registered Disability Savings Plan (RDSP).
- Explain that the RDSP helps Canadians with disabilities save for the future by enabling taxes to be deferred on the growth of assets held within the plan.
- Identify that Malcolm has a Social Insurance Number (SIN), since he already has an RESP. As such, he can open an RDSP.
- Explain that Malcolm may be the beneficiary of only one RDSP and that he retains all decision-making authority over the account, including investment choices and timing of withdrawals.
- Explain that anyone may contribute to the plan on behalf of Malcolm and that up to \$200,000 in total contributions are permitted over his lifetime.

<sup>46</sup> Expected gross rate of return = 3.9% (0.50) + 6.3% (0.5) = 5.1%

<sup>47</sup> Expected net rate of return = 5.1% - 1.00% = 4.1%

<sup>48</sup> Malcolm: Age 90 – 65 = 25 years

<sup>49</sup> N = 39; I/Y = 2%; PV = \$35,000; PMT = \$0. CPT FV = \$75,766.07

<sup>50</sup> N = 25; I/Y = 2%; PMT = \$75,766.07; FV = \$0. CPT PV = \$1,479,215.51

<sup>51</sup> N = 25; I/Y = 4.1%; PMT = \$75,766.07; FV = \$0. CPT PV = \$1,171,211.60

<sup>52</sup> N = 39 x 12 = 468; I/Y = 4.1%; PV = \$0; FV = \$1,171,211.60 CPT PMT = \$1,017.03

- Identify that, based on his income, Malcolm may apply for and qualify to receive a matching Canada Disability Savings Grant (CDSG) of up to 300 percent of the contributions made to his plan each year until he turns 49. He will receive \$3 for the first \$500 of contributions and \$2 for the next \$1,000 for a total of \$3,500 per year, up to \$70,000 over his lifetime. Should Malcolm be short of contributions in any given year to maximize the grant, his grant room may be carried forward.
- Identify that, if Malcolm receives \$3,500 of the CDSG per year, he will reach the annual maximum limit after 20 years.
- Calculate that, if Malcolm receives the CDSG for the next 20 years, it may grow to \$105,311.35<sup>53</sup> by his 46th birthday and \$225,963.89<sup>54</sup> by his 65<sup>th</sup> birthday.
- Calculate that the CDSG will reduce Malcolm's savings requirement to \$820.82<sup>55</sup> per month.
- Calculate that Malcolm's \$500 monthly savings would reduce his need by \$575,979.26<sup>56</sup> at age 65. This will leave him \$369,268.45<sup>57</sup> short of providing the income he requires in retirement.
- Identify that Malcolm may choose to reduce the shortfall at age 65 by drawing income at a later age, or saving more as his income may increase in the future.
- Explain that, in addition, Malcolm may apply and qualify for a partial Canada Disability Savings Bond (CDSB), based on his income. The CDSB is an additional annual contribution made to an RDSP by the Government of Canada, through which he may receive up to \$20,000 between now and his 49<sup>th</sup> birthday.
- Identify the providers of the RDSPs.
- Explain that, with the exception of Prince Edward Island and Quebec, withdrawals from an RDSP are fully exempt from the calculation of income for federal or provincial social assistance payments, such as the disability supplement that Malcolm currently receives.

### Knowledge Expectations – Down Payment for Malcolm, Tom and Patricia

The CFP professional should be able to:

- Identify that Malcolm is over the age of 21, his RESP has been in existence for more than 10 years and that he will not be returning to school. As such, he may transfer his investment income in the plan to an RDSP. Doing so will count as a contribution, but will not attract the CDSG. Any Canadian Education Savings Grants (CESGs) or Canada Learning Bonds (CLBs) remaining in the RESP would need to be repaid to Employment and Social Development Canada. Also, any contributions would need to be returned to Patricia and Tom tax-free. However, they would be free to provide those funds to Malcolm to help with his down payment on the condominium. Likewise, they could deposit them to his RDSP to help him earn matching grant money.

<sup>53</sup>  $N = 20$ ;  $I/Y = 4.1\%$ ;  $PV = \$0$ ;  $PMT = \$3,500$ .  $CPT FV = \$105,311.35$

<sup>54</sup>  $N = 19$ ;  $I/Y = 4.1\%$ ;  $PV = \$105,311.35$ ;  $PMT = \$0$ .  $CPT FV = \$225,963.89$

<sup>55</sup>  $\$1,171,211.60 - \$225,963.89 = \$945,247.71$

$N = 39 \times 12 = 468$ ;  $I/Y = 4.1\%$ ;  $PV = \$0$ ;  $FV = \$945,247.71$ .  $CPT PMT = \$820.82$

<sup>56</sup>  $N = 39 \times 12 = 468$ ;  $I/Y = 4.1\%$ ;  $PV = 0$ ;  $PMT = \$500$ .  $CPT FV = \$575,979.26$

<sup>57</sup>  $\$1,171,211.60 - \$225,963.89 - \$575,979.26 = \$369,268.45$

- Identify that Tom and Patricia have three options to provide Malcolm with \$20,000 for a down payment. They can:
  - Withdraw the money from Tom's RRSP under the HBP.
  - Withdraw the money from their TFSAs.
  - Borrow the money from their line of credit.
- Identify that Tom would qualify to withdraw up to \$25,000 from his RRSP under the HBP to help Malcolm with his down payment because Malcolm has a disability.
- Explain that if Tom withdraws money from his RRSP under the HBP, he must make annual repayments of at least \$1,333.33<sup>58</sup> beginning in the year after the withdrawal. The standard repayment period of 15 years will be shortened by four years since Tom will need to make full repayment under the HBP by the end of the year in which he turns 71.
- Explain that contributing to his RRSP, and then withdrawing funds under the HBP, is a good alternative to gifting the funds to Malcolm directly for his down payment since it provides Tom with an RRSP tax deduction.
- Explain that if Tom withdraws money under the HBP, he may designate his \$20,000 annual contribution to his RRSP as an HBP repayment.
- Calculate that if Tom removes \$20,000 from his RRSP under the HBP, and repays it using his annual contribution the following year, it may reduce his assets at age 65 by \$23,057.08<sup>59</sup> to \$918,271.81<sup>60</sup>. The couple will not meet their retirement goal using this strategy.
- Calculate that if Tom contributes \$20,000 annually to a TFSA for the next five years, and withdraws \$20,000 in the first year to help provide Malcolm with a down payment, his retirement assets may be worth \$918,271.81<sup>61</sup> at Tom's retirement date. This amount would be the same as withdrawing from his RRSP under the HBP. While this option is better than using the HBP, because the resulting withdrawals in retirement will be tax-free, the couple still may not meet their retirement goal.
- Calculate that if Tom borrows \$20,000 from the couple's line of credit at an interest rate of five percent for five years, his repayments will be \$377.42<sup>62</sup> per month.
- Calculate that Tom will need to reduce his RRSP contributions to \$15,470.96<sup>63</sup> annually to facilitate the repayments to the couple's line of credit.
- Calculate that, if Tom's RRSP contributions are \$15,470.96 annually for the next five years until he pays off the line of credit, his retirement assets may grow to \$916,983.75,<sup>64</sup> less than under the RSP and TFSA withdrawal option.
- Explain that, if the couple provides Malcolm with \$20,000, they will not meet their original retirement goal of providing a monthly income of \$6,000 before taxes from Tom's age of retirement at 65 onwards.

<sup>58</sup>  $\$20,000 / 15 = \$1,333.33$

<sup>59</sup>  $\$941,328.89 - \$918,271.81 = \$23,057.08$

<sup>60</sup>  $N = 1; I/Y = 3.62\%; PV = \$698,000; PMT = 0. CPT FV = \$723,267.60$   
 $N = 4; I/Y = 3.62\%; PV = \$723,267.60; PMT = -\$20,000. CPT FV = \$918,271.81$

<sup>61</sup>  $N = 1; I/Y = 3.62\%; PV = \$698,000; PMT = 0. CPT FV = \$723,267.60$   
 $N = 4; I/Y = 3.62\%; PV = \$723,267.60; PMT = -\$20,000. CPT FV = \$918,271.81$

<sup>62</sup>  $N = 5; I/Y = 3.62\%; PV = \$698,000; PMT = 15,470.96. CPT FV = \$916,983.75$

<sup>63</sup>  $N = 12 \times 15 = 180; I/Y = 3.62\%, PV = \$941,328.89 - \$918,271.81 = \$23,057.08; FV = 0. CPT PMT = \$166.19$

<sup>64</sup>  $N = 5; I/Y = 3.62\%; PV = \$698,000; PMT = 15,470.96. CPT FV = \$916,983.75$

## CASE STUDY – FAMILY DECISIONS

- Explain that the couple has three options if they provide Malcolm with \$20,000.
  - They may choose to receive \$101.75<sup>65</sup> less per month from Tom's age 65 to 80.
  - They may choose to retire eight months<sup>66</sup> after Tom turns 65.
  - They may find a way to save an additional \$351.13<sup>67</sup> per month for the next five years to make up the shortfall so that Tom may retire when he turns 65.

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<sup>65</sup>  $N = 12 \times 15 = 180$ ;  $I/Y = 3.62\%$ ,  $PV = \$941,328.89 - \$918,271.81 = \$23,057.08$ ;  $FV = 0$ .  $CPT\ PMT = \$166.19$

<sup>66</sup>  $I/Y = 3.62\%$ ,  $PV = -\$918,271.81$ ;  $PMT = \$0$ ;  $FV = \$941,328.89$ .  $CPT\ N = 8.23$

<sup>67</sup>  $N = 12 \times 5 = 60$ ;  $I/Y = 3.62\%$ ,  $PV = 0$ ;  $FV = \$23,057.08$ .  $CPT\ PYMT = \$351.13$

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