# **Ramon's Decision: Rolling Over or Cashing Out?**

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# ABSTRACT

This case is based on an actual investment decision that was made by an investment advisor's client. Ramon Perez has recently left a major employer in a mid-sized, Midwestern city. His employer had a defined contribution pension plan. Ramon must decide between a number of payout and reinvestment options by his 40<sup>th</sup> birthday, a month from now. In addition, Ramon feels he has about an equal probability of retiring at 60, 65, or 70 years of age. His actuarial life expectancy is 80 years. The case is designed to give undergraduate and MBA students' exposure to the determination of an optimal pension payout in a realistic setting. The students will assume that they have just been hired by a large firm as an investment advisor. They will consider what information they need to make a recommendation; calculate the future value of each option under several long-term return assumptions; calculate the after-tax future values; and calculate the monthly annuity due payments Ramon may take out after retirement. An earlier version of the case has been used for a number of years in finance coursework.

Keywords: Pension, Re-investment, Future Value, Annuity Due, Tax Considerations

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#### TASK

You just finished your finance program and have been hired by a large firm, in a mid-sized, Midwestern city, as an investment advisor. You are, of course, very interested in doing a good job and impressing your firm. The first client you have been assigned is Romon Perez. Ramon has just left his current employer with a defined contribution pension plan. He has been offered several possible payouts from the pension plan. He will be 40 years old in one month and must decide which option he will select. You will use your finance training to develop an analysis and recommendation for your client.

# **PAYOUT OPTIONS**

- 1. \$104,301.42 lump sum at age 40
- 2. \$540.12 monthly payments starting at age 40
- 3. \$1520.50 monthly payments starting at age 60
- 4. \$2,280.80 monthly payments starting at age 65

## **STEP 1 - QUESTIONS**

Develop a list of questions you would like to have answered to help complete your analysis and recommendation. *Your instructor will provide questions and answers before you start the next step.* 

# **STEP 2 – FUTURE VALUE AT RETIREMENT - IGNORING INCOME TAXES**

Ignoring income taxes, calculate the future value of Ramon's investment at retirement for each of the four payout options, below, using the three retirement options and the three expected return estimates listed in the assumptions from step 1, above:

- 1. \$104,301.42 lump sum at age 40 / 4%, 6%, and 8% return / retire at 60, 65, and 70
- 2. \$540.12 monthly payments starting at age 40 / 4%, 6%, and 8% return / retire at 60, 65, and 70
- 3. \$1520.50 monthly payments starting at age 60 / 4%, 6%, and 8% return / retire at 60, 65, and 70
- 4. \$2,280.80 monthly payments starting at age 65 / 4%, 6%, and 8% return / retire at 60, 65, and 70

#### STEP 3 – AMOUNT OF LIFETIME MONTHLY ANNUITY PAYMENT AT RETIREMENT – IGNORING INCOME TAXES

Ignoring income taxes, calculate the lifetime monthly annuity due payment that each of the payout options' future values would provide at retirement from step 2, above. Recall that Ramon's life expectancy is 80 years.

#### STEP 4 – TOTAL AMOUNT OF LIFETIME ANNUITY PAYMENTS AT RETIREMENT – IGNORING INCOME TAXES

Ignoring income taxes, calculate the total payout that each of the lifetime monthly annuities would provide from retirement through death.

#### **STEP 5 – PRESENT VALUE AT AGE 40 – IGNORING INCOME TAXES**

Ignoring income taxes, calculate the present value at age 40 for each of the payout options using the three retirement options and the three expected return estimates.

#### **STEP 6 - RECOMMENDATION - IGNORING INCOME TAXES**

Ignoring income taxes, what would be your recommendation for Ramon?

#### STEP 7 -PRESENT VALUE AT AGE 40 - INCLUDING INCOME TAXES

Now, including income taxes in your analysis, recompute Steps 2 through 5.

#### **STEP 8 - RECOMMENDATION - INCLUDING INCOME TAXES**

Including income taxes, what would be your recommendation for Ramon?



## **Teaching Note: - Pension Plan Case Study**

This case involves decision-making related to a pension plan upon leaving a company. The case can be used in a finance course, an individual taxation course or an accounting course.

## **Learning Objectives:**

- 1. Financial Analysis: Assess the available pension options including rolling over to a new plan, cashing out, or transferring to a new employer's plan.
- 2. Tax Implications: Analyze tax consequences including early withdrawal penalties, rollover rules and long-term strategies.
- 3. Decision-Making: Develop a structured approach to advising a client based on their financial goals, risk tolerance, and life situation.

## The case can be completed in 2 parts.

Give students the basic factual scenario and have the students identify additional facts necessary to make a recommendation to the client. This can be done by having each student submit questions to the client in the form of a professional letter or an email. Alternatively, students can engage in role-play where one student acts as the advisor and another acts as the client.

This case focuses on Ramon's options for his defined contribution plan after leaving his employer. This does, however, provide the instructor an opportunity to discuss broadly the different types of retirement plans<sup>1</sup> and, more specifically, employer-provided defined benefit and contribution plans covered by The Employee Retirement Income Security Act (ERISA)<sup>2</sup>. A defined benefit plan provides participants with a specific monthly payout upon retirement based on plan contributions.<sup>3</sup> The value and resulting payout for a defined contribution plan, however, will change based on the contributions and the investment performance.<sup>4</sup> With a contribution plan, the instructor has the option of delving deeper into the differences between 401(k), 403(b), ESOP and profit-sharing plans.

#### SOLUTION AND ASSUMPTIONS - STEP 1 (GIVE TO STUDENTS PRIOR TO STEP 2)

#### **Ramon's personal information:**

- Is he married? Yes
- Does he have children? Yes, 6 and 8 years old.
- Is he healthy? Yes
- Does he need these funds to finance his children's education? No.
- Does he need the lump sum today? No, he has a household income of \$200,000 and limited debt.
- What does he plan to do with the proceeds? He will reinvest the proceeds until he retires. At that time he will take out annuity due payments for the remainder of his life.

<sup>&</sup>lt;sup>1</sup> <u>https://www.dol.gov/general/topic/retirement</u>

<sup>&</sup>lt;sup>2</sup> 29 U.S.C. Chapter 18.

<sup>&</sup>lt;sup>3</sup> I.R.C. § 414(j).

<sup>&</sup>lt;sup>4</sup> I.R.C. § 414(i).

- What is Ramon's actuarial life expectancy? 80 years.
- When does he plan to retire? Hopefully 60, maybe 65 or 70. (Equal chance of retiring at each age.)
- What is his investment risk tolerance? Moderate prefers around a 70% Stock, 30% other (bond, real estate portfolio).
- What are long-term investment expected returns on the above portfolio? Investment professionals expect this type of portfolio to provide between 4% and 8% long-term return. (Use 4% lower risk, 6% moderate risk, and 8% higher risk for analysis.)
- What is his current tax rate? 30% average during his career; 15% at retirement.

# APPENDIX A - CALCULATIONS FOR RAMON'S DECISION: STEPS 2-5

Future Value at Retirement (Ignoring Income Taxes) Amount of Lifetime Monthly Annuity Payment at Retirement (Ignoring Income Taxes) Total Amount of Lifetime Annuity Payments at Retirement (Ignoring Income Taxes) Present Value at Age 40 (Ignoring Income Taxes)

# APPENDIX A – CALCULATIONS FOR RAMON'S DECISION: STEPS 2-5 (WITH TAXES)

Employee contributions to a defined benefit or contribution plan are generally made with pre-tax income, allowing individuals to defer income tax on the amounts contributed until retirement. There are annual limits on the amount that can be contributed on a pre-tax basis. on the ability to make pre-tax contributions. For the 2024 tax year, the elective deferral limit is \$23,000. The instructor can make a note here regarding amounts contributed to a pension above the limitation. Such amounts will be subject to double taxation – once at the time of "deferral" and again at distribution – unless the employee withdrawals the additional funds before April 15.

In addition to employee contributions, employer matching contributions to these plans are generally excluded from the employee's gross income.<sup>6</sup> Unlike employee contributions, there are no annual limits on employer matching contributions.

If contributions to the plan are solely from pre-tax income and employer contributions, there are no immediate income tax consequences to the formation and funding of the plan. The tax implications arise when the employee begins receiving distributions from the plan.<sup>7</sup>

The next part of this case involves analyzing Ramon's options considering his tax rates. He is presented with the options of taking a lump sum beginning in October of the current year, taking monthly payments beginning in October of the current year, or starting monthly payments at retirement. Here, the instructor should note that if all funds from the pension are from deferred income or employer-matching contributions, Ramon will be taxed on distributions at his marginal tax rate.<sup>8</sup> This applies whether the amount is taken as a lump sum or paid out in periodic payments. The instructor can discuss the different tax rates based on filing status,

<sup>&</sup>lt;sup>5</sup> <u>https://www.irs.gov/retirement-plans/how-much-salary-can-you-defer-if-youre-eligible-for-more-than-one-retirement-plan.</u>

<sup>&</sup>lt;sup>6</sup> I.R.C. §§ 401, 403, 501(a); HOWELL v. U.S., 57 AFTR 2d 86-768 (CA7 1985).

<sup>&</sup>lt;sup>7</sup> I.R.C. § 408(d)(1).

<sup>&</sup>lt;sup>8</sup> I.R.C. § 72.

discuss the progressive income tax structure, and look at the Excel spreadsheets (with taxes) to provide an after-tax distribution analysis.

As a second point of note, the rules for taxation of pensions at the state level vary by state. Students will need to know the state tax rules for the state where Ramon lives when he takes the distribution(s). The instructor can assign students to analyze different states which will result in a different overall tax effect for Ramon depending on the law of the assigned state.

The instructor should emphasize the early withdrawal penalty and the applicable exceptions for taking distributions from retirement funds before age 59 <sup>1</sup>/<sub>2</sub>.<sup>9</sup> If Ramon opts for a lump-sum payment in October of the current year, he will not only pay tax on the distributed funds at his marginal rate, he will also pay a 10% penalty on the early distribution.<sup>10</sup> There is a list of exceptions to avoid the 10% penalty including medical withdrawals, education withdrawals, and substantially equal periodic payments (SEPP).<sup>11</sup> The IRS has approved 3 methods to apply the SEPP exception that would specifically apply to Ramon's situation if he chooses periodic payments beginning in October of the current year.<sup>12</sup> He would still be subject to income tax on the distributions, but if he structures his payments within one of the three safe harbors approved by the IRS, he will avoid the 10% penalty.

The instructor should clarify that rolling over funds to another retirement account does not count as a taxable distribution.<sup>13</sup> Ramon has 60 days to roll the funds over to another account. The tax event for rolled-over funds occurs when the distributions are taken. Moreover, If Ramon moves his pension into another retirement account and delays distributions to age 60, 65, or 70, the 10% penalty no longer applies.

Finally, students should review basic rules for required minimum distributions (RMDs). If Ramon delays his retirement until 70 or later and postpones taking money from his pension, he needs to be aware of the rules for RMDs.<sup>14</sup> The current rules mandate regular distributions once a taxpayer reaches the age of 73. This number will increase to 75 starting in 2032. Failure to take required distributions by the age date established can result in excise taxes of up to 50% on the undistributed amounts.

<sup>&</sup>lt;sup>9</sup> I.R.C. § 72(t).

<sup>&</sup>lt;sup>10</sup> I.R.C. § 72(t)(1).

<sup>&</sup>lt;sup>11</sup> I.R.C. § 72(q)(2), (t)(2).

<sup>&</sup>lt;sup>12</sup> https://www.thetaxadviser.com/issues/2008/oct/substantiallyequalperiodicpaymentsfromanira.html.

<sup>&</sup>lt;sup>13</sup> Treas. Reg. § 1.402(c)-2.

<sup>&</sup>lt;sup>14</sup> I.R.C. § 401(a)(9).

# Appendix A

STEP 2 - FUTURE VALUE	AT RETIREMEN	I - NO TAKES:												
RETIRE AT 60 YEARS		Total CF	Monthsto	FV Age 60	RETIRE AT 65 YEARS		Total CF	Months to	FV Age 65	RETIRE AT 70 YEARS		Total CF	Monthsto	FV Age 70
			60 Years	Retirement				65 Years	Retirement				70 Years	Retirement
4%Annual Return Comp	ounded Monthl	y	0.04		4%Annual Return Compo	unded Monthly		0.04		4% Annual Return Compo	unded Monthly	/	0.04	
Lump sum now - Age 40	\$ 104,301.42	\$ 104,301.42	240	\$ 231,818.47	Lump sum now - Age 40	\$ 104,301.42	\$ 104,301.42	300	\$ 283,049.56	Lump sum now - Age 40	\$ 104,301.42	\$ 104,301.42	360	\$ 345,602.55
Monthly Payment - Age 4	\$ 540.12	\$ 129,628.80	240	\$ 198,762.65	Monthly Payment - Age 4	\$ 540.12	\$ 162,036.00	300	\$ 278,617.29	Monthly Payment - Age 4	\$ 540.12	\$ 194,443.20	360	\$ 376,119.53
Monthly Payment - Age 6	\$ 1,520.50	\$-	0	\$-	Monthly Payment - Age 6	\$ 1,520.50	\$ 91,230.00	60	\$ 101,143.62	Monthly Payment - Age 6	\$ 1,520.50	\$ 182,460.00	120	\$ 224,639.64
Monthly Payment - Age 6	\$ 2,280.80	\$-	0	\$-	Monthly Payment - Age 6	\$ 2,280.80	\$-	0	\$-	Monthly Payment - Age 6	\$ 2,280.80	\$ 136,848.00	60	\$ 151,718.76
6%Annual Return Comp	ounded Monthl	y	0.06		6%Annual Return Compo	unded Monthly		0.06		6%Annual Return Compo	unded Monthly	/	0.06	
Lump sum now - Age 40	\$ 104,301.42	\$ 104,301.42	240	\$ 345,259.03	Lump sum now - Age 40	\$ 104,301.42	\$ 104,301.42	300	\$ 465,702.69	Lump sum now - Age 40	\$ 104,301.42	\$ 104,301.42	360	\$ 628,163.15
Monthly Payment - Age 4	\$ 540.12	\$ 129,628.80	240	\$ 250,805.32	Monthly Payment - Age 4	\$ 540.12	\$ 162,036.00	300	\$ 376,171.40	Monthly Payment - Age 4	\$ 540.12	\$ 194,443.20	360	\$ 545,271.46
Monthly Payment - Age 6	\$ 1,520.50	\$-	0	\$-	Monthly Payment - Age 6	\$ 1,520.50	\$ 91,230.00	60	\$ 106,615.76	Monthly Payment - Age 6	\$ 1,520.50	\$ 182,460.00	120	\$ 250,424.44
Monthly Payment - Age 6	\$ 2,280.80	\$-	0	\$-	Monthly Payment - Age 6	\$ 2,280.80	\$-	0	\$-	Monthly Payment - Age 6	\$ 2,280.80	\$ 136,848.00	60	\$ 159,927.14
8%Annual Return Comp	ounded Monthl	y	0.08		8%Annual Return Compo	unded Monthly	r	0.08		8%Annual Return Compo	unded Monthly	/		
Lump sum now - Age 40	\$ 104,301.42	\$ 104,301.42	240	\$ 513,872.53	Lump sum now - Age 40	\$ 104,301.42	\$ 104,301.42	300	\$ 765,590.78	Lump sum now - Age 40	\$ 104,301.42	\$ 104,301.42	360	\$ 1,140,612.13
Monthly Payment - Age 4	\$ 540.12	\$ 129,628.80	240	\$ 320,262.65	Monthly Payment - Age 4	\$ 540.12	\$ 162,036.00	300	\$ 517,092.83	Monthly Payment - Age 4	\$ 540.12	\$ 194,443.20	360	\$ 810,339.43
Monthly Payment - Age 6	\$ 1,520.50	\$-	0	\$-	Monthly Payment - Age 6	\$ 1,520.50	\$ 91,230.00	60	\$112,466.37	Monthly Payment - Age 6	\$ 1,520.50	\$ 182,460.00	120	\$280,023.91
Monthly Payment - Age 6	\$ 2,280.80	\$-	0	\$-	Monthly Payment - Age 6	\$ 2,280.80	\$-	0	\$-	Monthly Payment - Age 6	\$ 2,280.80	\$ 136,848.00	60	\$168,703.25
STEP 3 - MONTHLY ANNI	JITY PAYMENT.	ATRETIREMENT - N	IO TAXES:											
RETIRE AT 60 YEARS	Monthsto	Second Annuity	First Annuity	Total Annuity	RETIRE AT 65 YEARS	Monthsto	Second Annuity	First Annuity	Total Annuity	RETIRE AT 70 YEARS	Months to	Second Annuity	First Annuity	Total Annuity
	80 Years	Payment	Payment	Payment		80 Years	Payment	Payment	Payment		80 Years	Payment	Payment	Payment
4%Annual Return Annuit	yDue	0.04			4% Annual Return Annuity	Due	0.04			4% Annual Return Annuity	/Due		0.04	
Lump sum now - Age 40	240	\$1,400.11	ş -	\$1,400.11	Lump sum now - Age 40	180	\$2,086.73		\$2,086.73	Lump sum now - Age 40	120	\$3,487.43	\$-	\$3,487.43
Monthly Payment - Age 4	240	\$1,200.46	\$ 540.12	\$1,740.58	Monthly Payment - Age 4	180	\$2,054.05	¢ E40.10	do 504 47	Manufals, December Anna 4		do 705 00	¢ 540.40	\$4,335,50
Monthly Payment - Age 6	240	\$0.00	A 4 500 50					φ 340.12	\$2,594.17	Monthly Payment - Age 4	120	\$3,795.38	φ 540.12	+.,
Monthly Payment - Age 6	190		\$ 1,520.50	\$1,520.50	Monthly Payment - Age 6	180	\$745.66	\$ 1,520.50	\$2,594.17 \$2,266.16	Monthly Payment - Age 6	120	\$3,795.38 \$2,266.81	\$ 540.12 \$ 1,520.50	\$3,787.31
	100	\$0.00	\$ 1,520.50 \$ 2,280.80	\$1,520.50 \$2,280.80	Monthly Payment - Age 6 Monthly Payment - Age 6	180 180	\$745.66 \$0.00	\$ 1,520.50 \$ 2,280.80	\$2,594.17 \$2,266.16 \$2,280.80	Monthly Payment - Age 6 Monthly Payment - Age 6 Monthly Payment - Age 6	120 120 120	\$3,795.38 \$2,266.81 \$1,530.98	\$ 540.12 \$ 1,520.50 \$ 2,280.80	\$3,787.31 \$3,811.78
6%Annual Heturn Annuit	y Due	\$0.00	\$ 1,520.50 \$ 2,280.80	\$1,520.50 \$2,280.80	Monthly Payment - Age 6 Monthly Payment - Age 6 6% Annual Peturn Annuity	180 180 / Due	\$745.66 \$0.00 0.06	\$ 1,520.50 \$ 2,280.80	\$2,594.17 \$2,266.16 \$2,280.80	Monthly Payment - Age 6 Monthly Payment - Age 6 6%Annual Return Annuit	120 120 120 /Due	\$3,795.38 \$2,266.81 \$1,530.98	\$ 540.12 \$ 1,520.50 \$ 2,280.80 0.06	\$3,787.31 \$3,811.78
6%Annual Heturn Annuit Lump sum now - Age 40	y Due 240	\$0.00 0.06 \$2,461.24	\$ 1,520.50 \$ 2,280.80 \$ -	\$1,520.50 \$2,280.80 \$2,461.24	Monthly Payment - Age 6 Monthly Payment - Age 6 6% Annual Peturn Annuity Lump sum now - Age 40	180 180 / Due 180	\$745.66 \$0.00 0.06 \$3,910.31	\$ 340.12 \$ 1,520.50 \$ 2,280.80 \$ -	\$2,594.17 \$2,266.16 \$2,280.80 \$3,910.31	Montrily Payment - Age 4 Monthly Payment - Age 6 Monthly Payment - Age 6 6%Annual Return Annuity Lump sum now - Age 40	120 120 120 /Due 120	\$3,795.38 \$2,266.81 \$1,530.98 \$4,477.97	\$ 540.12 \$ 1,520.50 \$ 2,280.80 0.06 \$ -	\$3,787.31 \$3,811.78 \$4,477.97
6% Annual Heturn Annual Lump sum now - Age 40 Monthly Payment - Age 4	y Due 240 240	\$0.00 0.06 \$2,461.24 \$1,787.91	\$ 1,520.50 \$ 2,280.80 \$ - \$ 540.12	\$1,520.50 \$2,280.80 \$2,461.24 \$2,328.03	Monthly Payment - Age 6 Monthly Payment - Age 6 6%Annual Peturn Annuity Lump sum now - Age 40 Monthly Payment - Age 4	180 180 / Due 180 180	\$745.66 \$0.00 0.06 \$3,910.31 \$3,158.56	\$ 540.12 \$ 1,520.50 \$ 2,280.80 \$ - \$ 540.12	\$2,594.17 \$2,266.16 \$2,280.80 \$3,910.31 \$3,698.68	Monthly Payment - Age 4 Monthly Payment - Age 6 Monthly Payment - Age 6 6%Annual Return Annuit Lump sum now - Age 40 Monthly Payment - Age 4	120 120 120 7Due 120 120	\$3,795.38 \$2,266.81 \$1,530.98 \$4,477.97 \$3,887.06	\$ 540.12 \$ 1,520.50 \$ 2,280.80 0.06 \$ - \$ 540.12	\$3,787.31 \$3,811.78 \$4,477.97 \$4,427.18
6%Annual Heturn Annuit Lump sum now - Age 40 Monthly Payment - Age 4 Monthly Payment - Age 6	y Due 240 240 240	\$0.00 0.06 \$2,461.24 \$1,787.91 \$0.00	\$ 1,520.50 \$ 2,280.80 \$ - \$ 540.12 \$ 1,520.50	\$1,520.50 \$2,280.80 \$2,461.24 \$2,328.03 \$1,520.50	Monthly Payment - Age 6 Monthly Payment - Age 6 6%Annual Peturn Annuity Lump sum now - Age 40 Monthly Payment - Age 4 Monthly Payment - Age 6	180 180 / Due 180 180 180	\$745.66 \$0.00 0.06 \$3,910.31 \$3,158.56 \$895.21	\$ 540.12 \$ 1,520.50 \$ 2,280.80 \$ - \$ 540.12 \$ 1,520.50	\$2,594.17 \$2,266.16 \$2,280.80 \$3,910.31 \$3,698.68 \$2,415.71	Monthly Payment - Age 4 Monthly Payment - Age 6 6%Annual Return Annuit Lump sum now - Age 40 Monthly Payment - Age 4 Monthly Payment - Age 6	120 120 /Due 120 120 120 120	\$3,795.38 \$2,266.81 \$1,530.98 \$4,477.97 \$3,887.06 \$1,785.19	\$ 540.12 \$ 1,520.50 \$ 2,280.80 0.06 \$ - \$ 540.12 \$ 1,520.50	\$3,787.31 \$3,811.78 \$4,477.97 \$4,427.18 \$3,305.69
6%Annual Heturn Annuit Lump sum now - Age 40 Monthly Payment - Age 4 Monthly Payment - Age 6 Monthly Payment - Age 6	y Due 240 240 240 180	\$0.00 0.06 \$2,461.24 \$1,787.91 \$0.00 \$0.00	\$ 1,520.50 \$ 2,280.80 \$ - \$ 540.12 \$ 1,520.50 \$ 2,280.80	\$1,520.50 \$2,280.80 \$2,461.24 \$2,328.03 \$1,520.50 \$2,280.80	Monthly Payment - Age 6 Monthly Payment - Age 6 6% Annual Peturn Annuith Lump sum now - Age 40 Monthly Payment - Age 6 Monthly Payment - Age 6	180 180 / Due 180 180 180 180	\$745.66 \$0.00 0.06 \$3,910.31 \$3,158.56 \$895.21 \$0.00	\$ 540.12 \$ 1,520.50 \$ 2,280.80 \$ - \$ 540.12 \$ 1,520.50 \$ 2,280.80	\$2,594,17 \$2,266,16 \$2,280,80 \$3,910,31 \$3,698,68 \$2,415,71 \$2,280,80	Monthly Payment - Age a Monthly Payment - Age 6 Monthly Payment - Age 6 6% Annual Return Annuit Limp sum now - Age 40 Monthly Payment - Age 6 Monthly Payment - Age 6	120 120 (Due 120 120 120 120 120	\$3,795.38 \$2,266.81 \$1,530.98 \$4,477.97 \$3,887.06 \$1,785.19 \$1,140.07	\$ 540.12 \$ 1,520.50 \$ 2,280.80 0.06 \$ - \$ 540.12 \$ 1,520.50 \$ 2,280.80	\$3,787.31 \$3,811.78 \$4,477.97 \$4,427.18 \$3,305.69 \$3,420.87
6% Annual Heturn Annuit Lump sum now - Age 40 Monthly Payment - Age 4 Monthly Payment - Age 6 Monthly Payment - Age 6 8% Annual Return Annuit	yDue 240 240 240 180 yDue	\$0.00 0.06 \$2,461.24 \$1,787.91 \$0.00 \$0.00 0.08	\$ 1,520.50 \$ 2,280.80 \$ - \$ 540.12 \$ 1,520.50 \$ 2,280.80	\$1,520.50 \$2,280.80 \$2,461.24 \$2,328.03 \$1,520.50 \$2,280.80	Monthly Payment - Age 6 %Annual Feturn Annuit Lump sum now - Age 40 Monthly Payment - Age 4 Monthly Payment - Age 6 8%Annual Feturn Annuity	180 180 180 180 180 180 180 180 180	\$745.66 \$0.00 0.06 \$3,910.31 \$3,158.56 \$895.21 \$0.00 0.08	\$ 540.12 \$ 1,520.50 \$ 2,280.80 \$ - \$ 540.12 \$ 1,520.50 \$ 2,280.80	\$2,594.17 \$2,266.16 \$2,280.80 \$3,698.68 \$2,415.71 \$2,280.80	Monthly Payment - Age 4 Monthly Payment - Age 6 Monthly Payment - Age 6 6%Annual Peturn Annuitt Lump sum now - Age 40 Monthly Payment - Age 6 Monthly Payment - Age 6 8%Annual Peturn Annuitt	120 120 120 120 120 120 120 120 120 120	\$3,755.38 \$2,266.81 \$1,530.98 \$4,477.97 \$3,887.06 \$1,785.19 \$1,140.07	\$ 540.12 \$ 1,520.50 \$ 2,280.80 0.06 \$ - \$ 540.12 \$ 1,520.50 \$ 2,280.80 0.08	\$3,787.31 \$3,811.78 \$4,477.97 \$4,427.18 \$3,305.69 \$3,420.87
6% Annual Heturn Annuit Lump sum now - Age 40 Monthly Payment - Age 4 Monthly Payment - Age 6 Monthly Payment - Age 6 8% Annual Peturn Annuit Lump sum now - Age 40	yDue 240 240 240 240 180 yDue 240	\$0.00 0.06 \$2,461.24 \$1,787.91 \$0.00 \$0.00 0.08 \$4,269.77	\$ 1,520.50 \$ 2,280.80 \$ - \$ 540.12 \$ 1,520.50 \$ 2,280.80 \$ -	\$1,520.50 \$2,280.80 \$2,461.24 \$2,328.03 \$1,520.50 \$2,280.80 \$2,280.80 \$4,269.77	Monthly Payment - Age 6 Monthly Payment - Age 6 6%Annual Peturn Annuity Lump sum now - Age 40 Monthly Payment - Age 6 Monthly Payment - Age 6 Monthly Payment - Age 6 8%Annual Feturn Annuity Lump sum now - Age 40	180 180 180 180 180 180 180 7 Due 180	\$745.66 \$0.00 0.06 \$3,910.31 \$3,158.56 \$895.21 \$0.00 0.08 \$7,267.93	\$ 540.12 \$ 1,520.50 \$ 2,280.80 \$ - \$ 540.12 \$ 1,520.50 \$ 2,280.80 \$ -	\$2,594.17 \$2,266.16 \$2,280.80 \$3,698.68 \$2,415.71 \$2,280.80	Monthly Payment - Age 4 Monthly Payment - Age 6 8%Annual Peturn Annuit Lump sum now - Age 40 Monthly Payment - Age 6 Monthly Payment - Age 6 Monthly Payment - Age 6 8%Annual Peturn Annuit Lump sum now - Age 40	120 120 (Due 120 120 120 120 120 (Due 120 (Due	\$4,75,36 \$2,266,81 \$1,530,98 \$4,477.97 \$3,887.06 \$1,785.19 \$1,140.07 \$9,477.35	\$ 540.12 \$ 1,520.50 \$ 2,280.80 0.06 \$ - \$ 540.12 \$ 1,520.50 \$ 2,280.80 0.08 \$ -	\$3,787.31 \$3,811.78 \$4,477.97 \$4,427.18 \$3,305.69 \$3,420.87 \$9,477.35
6% Annual Heturn Annuit Lump sum now - Age 40 Monthly Payment - Age 4 Monthly Payment - Age 6 Monthly Payment - Age 6 8% Annual Feturn Annuit Lump sum now - Age 40 Monthly Payment - Age 4	yDue 240 240 240 240 180 yDue 240 240	\$0.00 0.06 \$2,461.24 \$1,787.91 \$0.00 0.08 \$4,269.77 \$2,661.06	\$ 1,520.50 \$ 2,280.80 \$ - \$ 540.12 \$ 1,520.50 \$ 2,280.80 \$ - \$ 540.12	\$1,520.50 \$2,280.80 \$2,461.24 \$2,328.03 \$1,520.50 \$2,280.80 \$4,269.77 \$3,201.18	Monthly Payment - Age 6 Monthly Payment - Age 6 %Annual Feturn Annuity Lump sum now - Age 40 Monthly Payment - Age 6 Monthly Payment - Age 6 %Annual Feturn Annuity Lump sum now - Age 40 Monthly Payment - Age 4	180 180 (Due 180 180 180 180 (Due 180 180	\$745.66 \$0.00 0.06 \$3,910.31 \$3,158.56 \$895.21 \$0.00 0.08 \$7,267.93 \$4,908.88	\$ 540.12 \$ 1,520.50 \$ 2,280.80 \$ . \$ 540.12 \$ 1,520.50 \$ 2,280.80 \$ . \$ 540.12	\$2,394.17 \$2,266.16 \$2,280.80 \$3,910.31 \$3,698.68 \$2,415.71 \$2,280.80 \$7,267.93 \$5,449.00	Monthly Payment - Age 4 Monthly Payment - Age 6 Monthly Payment - Age 6 6% Annual Feturn Annuit Lump sum now - Age 40 Monthly Payment - Age 6 Monthly Payment - Age 6 Monthly Payment - Age 6 8% Annual Feturn Annuit Lump sum now - Age 40 Monthly Payment - Age 4	120 120 120 120 120 120 120 120 120 120	\$4,75.38 \$2,266.81 \$1,530.98 \$4,477.97 \$3,887.06 \$1,785.19 \$1,140.07 \$9,477.35 \$4,894.18	\$ 540.12 \$ 1,520.50 \$ 2,280.80 \$ - \$ 540.12 \$ 1,520.50 \$ 2,280.80 0.06 \$ - \$ 540.12	\$3,787.31 \$3,811.78 \$4,477.97 \$4,427.18 \$3,305.69 \$3,420.87 \$9,477.35 \$5,434.30
6%Annual Heturn Annuit Lump sum now - Age 40 Monthly Payment - Age 4 Monthly Payment - Age 6 Monthly Payment - Age 6 8%Annual Return Annuit Lump sum now - Age 40 Monthly Payment - Age 4 Monthly Payment - Age 4	y Due 240 240 240 180 y Due 240 240 240	\$0.00 0.06 \$2,461.24 \$1,787.91 \$0.00 0.08 \$4,269.77 \$2,661.06 \$0.00	\$ 1,520.50 \$ 2,280.80 \$ - \$ 540.12 \$ 1,520.50 \$ 2,280.80 \$ - \$ 540.12 \$ - \$ 540.12 \$ - \$ 540.12 \$ - \$ 540.12	\$1,520.50 \$2,280.80 \$2,461.24 \$2,328.03 \$1,520.50 \$4,269.77 \$3,201.18 \$1,520.50	Monthly Payment - Age 6 Monthly Payment - Age 6 (% Annual Feturn Annuity Lump sum now - Age 40 Monthly Payment - Age 6 Monthly Payment - Age 6 (% Annual Peturn Annuity Lump sum now - Age 40 Monthly Payment - Age 4 Monthly Payment - Age 4	180 180 / Due 180 180 180 / Due 180 180 180	\$745.66 \$0.00 0.06 \$3,910.31 \$3,158.56 \$895.21 \$0.00 0.08 \$7,267.93 \$4,908.88 \$4,908.88	\$ 040.12 \$ 1,520.50 \$ 2,280.80 \$ - \$ 540.12 \$ 1,520.50 \$ 2,280.80 \$ 2,280.80 \$ 540.12 \$ 540.12 \$ 540.12 \$ 540.12	\$2,594,17 \$2,266,16 \$2,280,80 \$3,910,31 \$3,698,68 \$2,415,71 \$2,280,80 \$7,267,93 \$5,449,00 \$2,588,17	wohning Payment - Age 6 Monthly Payment - Age 6 6%Annual Feturn Annuit Lump sum now - Age 40 Monthly Payment - Age 6 Monthly Payment - Age 6 8%Annual Feturn Annuit Lump sum now - Age 40 Monthly Payment - Age 4 Monthly Payment - Age 6	120 120 /Due 120 120 120 120 120 120 120 120 120 120	\$4,755,36 \$2,266,81 \$1,530,98 \$4,477.97 \$3,887.06 \$1,785,19 \$1,140.07 \$9,477.35 \$4,894,18 \$1,691.25	\$ 940.12 \$ 1,520.50 \$ 2,280.80 0.06 \$ - \$ 540.12 \$ 1,520.50 \$ 2,280.80 0.08 \$ 2,280.80 0.08 \$ - \$ 540.12 \$ 1,520.50	\$3,787.31 \$3,811.78 \$4,477.97 \$4,427.18 \$3,305.69 \$3,420.87 \$9,477.35 \$5,434.30 \$3,211.75

RETIRE AT 60 YEARS	Months to	Total Annuity	Total	RETIRE AT 65 YEARS	Monthsto	Total Annuity	Total	RETIRE AT 70 YEARS	Months to	Total Annuity	Total
	60-80 Years	Payment	Payments		65-80 Years	Payment	Payments		70-80 Years	Payment	Payments
4% Annual Return Annuit	y Due		A CA	4% Annual Return Annuit	y Due			4% Annual Return Annuit	ly Due		
Lump sum now - Age 40	240	\$1,400.11	\$336,025.75	Lump sum now - Age 40	180	\$2,086.73	\$375,610.98	Lump sum now - Age 40	120	\$3,487.43	\$418,491.96
Monthly Payment - Age 4	240	\$1,740.58	\$417,739.45	Monthly Payment - Age 4	180	\$2,594.17	\$466,950.89	Monthly Payment - Age 4	120	\$4,335.50	\$520,259.54
Monthly Payment - Age 6	240	\$1,520.50	\$364,920.00	Monthly Payment - Age 6	180	\$2,266.16	\$407,909.09	Monthly Payment - Age 6	120	\$3,787.31	\$454,477.33
Monthly Payment - Age 6	180	\$2,280.80	\$410,544.00	Monthly Payment - Age 6	180	\$2,280.80	\$410,544.00	Monthly Payment - Age 6	120	\$3,811.78	\$457,413.05
6% Annual Return Annuit	y Due		122	6% Annual Return Annuit	y Due			6% Annual Return Annuit	y Due		
Lump sum now - Age 40	240	\$2,461.24	\$590,696.81	Lump sum now - Age 40	180	\$3,910.31	\$703,856.23	Lump sum now - Age 40	120	\$4,477.97	\$537,355.93
Monthly Payment - Age 4	240	\$2,328.03	\$558,726.63	Monthly Payment - Age 4	180	\$3,698.68	\$665,761.55	Monthly Payment - Age 4	120	\$4,427.18	\$531,261.45
Monthly Payment - Age 6	240	\$1,520.50	\$364,920.00	Monthly Payment - Age 6	180	\$2,415.71	\$434,827.50	Monthly Payment - Age 6	120	\$3,305.69	\$396,683.10
Monthly Payment - Age 6	180	\$2,280.80	\$410,544.00	Monthly Payment - Age 6	180	\$2,280.80	\$410,544.00	Monthly Payment - Age 6	120	\$3,420.87	\$410,504.09
8% Annual Return Annuit	y Due		R	8% Annual Return Annuit	y Due		17-	8% Annual Return Annuit	ty Due		
Lump sum now - Age 40	240	\$4,269.77	\$1,024,744.94	Lump sum now - Age 40	180	\$7,267.93	\$1,308,227.64	Lump sum now - Age 40	120	\$9,477.35	\$1,137,282.54
Monthly Payment - Age 4	240	\$3,201.18	\$768,284.33	Monthly Payment - Age 4	180	\$5,449.00	\$980,820.46	Monthly Payment - Age 4	120	\$5,434.30	\$652,116.43
Monthly Payment - Age 6	240	\$1,520.50	\$364,920.00	Monthly Payment - Age 6	180	\$2,588.17	\$465,870.49	Monthly Payment - Age 6	120	\$3,211.75	\$385,410.28
Monthly Payment - Age 6	180	\$2,280.80	\$410,544.00	Monthly Payment - Age 6	180	\$2,280.80	\$410,544.00	Monthly Payment - Age 6	120	\$3,299.71	\$395,965.46

STEP 5 - PRESENT VALUE AT AGE 40:									
	Payment	Number of	Total		Present Value				
		Payments	Payments						
4% Annual Return Compounded Monthly				0.04	1				
Lump sum now - Age 40	\$104,301.42	1	\$ 104,301.42	\$ 104,301.42	Age 40				
Monthly Payment - Age 4	\$ 540.12	480	\$ 259,257.60	\$129,665.12	Age 40				
Monthly Payment - Age 6	\$ 1,520.50	240	\$ 364,920.00	\$251,752.12	Age 60	\$113,270.11	Age 40		
Monthly Payment - Age 6	\$ 2,280.80	180	\$ 410,544.00	\$309,374.07	Age 65	\$114,001.79	Age 40		
6% Annual Return Comp	ounded Month	nly		0.06	6				
Lump sum now - Age 40	\$104,301.42	1	\$ 104,301.42	\$ 104,301.42	Age 40				
Monthly Payment - Age 4	\$ 540.12	480	\$ 259,257.60	\$98,656.33	Age 40				
Monthly Payment - Age 6	\$ 1,520.50	240	\$ 364,920.00	\$213,293.73	Age 60	\$64,435.21	Age 40		
Monthly Payment - Age 6	\$ 2,280.80	180	\$ 410,544.00	\$271,634.23	Age 65	\$60,836.75	Age 40		
8% Annual Return Comp	ounded Month	nly		0.08	3				
Lump sum now - Age 40	\$104,301.42	1	\$ 104,301.42	\$ 104,301.42	Age 40				
Monthly Payment - Age 4	\$ 540.12	480	\$ 259,257.60	\$78,198.14	Age 40				
Monthly Payment - Age 6	\$ 1,520.50	240	\$ 364,920.00	\$182,994.18	Age 60	\$37,142.58	Age 40		
Monthly Payment - Age 6	\$ 2,280.80	180	\$ 410,544.00	\$240,255.36	Age 65	\$32,731.55	Age 40		

# Journal of Business Cases and Applications

STEP 2 - FUTURE VALUE	AT RETIREMEN	T-TAXES:												
RETIRE AT 60 YEARS		Total CF	Monthsto	FV Age 60	RETIRE AT 65 YEARS		Total CF	Months to	FV Age 65	RETIRE AT 70 YEARS		Total CF	Monthsto	FV Age 70
			60 Years	Retirement				65 Years	Retirement				70 Years	Retirement
4%Annual Return Comp	ounded Monthl	y	0.04		4%Annual Return Compo	ounded Monthly	/	0.04	l .	4% Annual Return Compo	ounded Monthly	/	0.04	
Lump sum now - Age 40	\$ 62,580.85	\$ 62,580.85	240	\$ 139,091.08	Lump sum now - Age 40	\$ 62,580.85	\$ 62,580.85	300	\$ 169,829.74	Lump sum now - Age 40	\$ 62,580.85	\$ 62,580.85	360	\$ 207,361.53
Monthly Payment - Age 4	\$ 378.08	\$ 90,740.16	240	\$ 139,133.86	Monthly Payment - Age 4	\$ 378.08	\$ 113,425.20	300	\$ 195,032.10	Monthly Payment - Age 4	\$ 378.08	\$ 136,110.24	360	\$ 263,283.67
Monthly Payment - Age 6	\$ 1,292.43	\$-	0	\$-	Monthly Payment - Age 6	\$ 1,064.35	\$ 63,861.00	60	\$ 70,800.54	Monthly Payment - Age 6	\$ 1,064.35	\$ 127,722.00	120	\$ 157,247.75
Monthly Payment - Age 6	\$ 1,938.68	\$-	0	\$-	Monthly Payment - Age 6	\$ 1,938.68	\$-	0	\$-	Monthly Payment - Age 6	\$ 1,596.56	\$ 95,793.60	60	\$ 106,203.13
6%Annual Return Comp	ounded Monthl	y	0.06		6%Annual Return Compo	ounded Monthly	/	0.06	6	6%Annual Return Compo	ounded Monthly	/	0.06	
Lump sum now - Age 40	\$ 62,580.85	\$ 62,580.85	240	\$ 207,155.42	Lump sum now - Age 40	\$ 62,580.85	\$ 62,580.85	300	\$ 279,421.61	Lump sum now - Age 40	\$ 62,580.85	\$ 62,580.85	360	\$ 376,897.89
Monthly Payment - Age 4	\$ 378.08	\$ 90,740.16	240	\$ 175,563.72	Monthly Payment - Age 4	\$ 378.08	\$ 113,425.20	300	\$ 263,319.98	Monthly Payment - Age 4	\$ 378.08	\$ 136,110.24	360	\$ 381,690.02
Monthly Payment - Age 6	\$ 1,292.43	\$-	0	\$-	Monthly Payment - Age 6	\$ 1,064.35	\$ 63,861.00	60	\$ 74,631.03	Monthly Payment - Age 6	\$ 1,064.35	\$ 127,722.00	120	\$ 175,297.11
Monthly Payment - Age 6	\$ 1,938.68	\$-	0	\$-	Monthly Payment - Age 6	\$ 1,938.68	\$-	0	\$-	Monthly Payment - Age 6	\$ 1,596.56	\$ 95,793.60	60	\$ 111,949.00
8%Annual Return Compo	ounded Monthl	y	0.08		8% Annual Return Compo	ounded Monthly	/	0.08	8	8%Annual Return Compo	ounded Monthl	/	0.08	
Lump sum now - Age 40	\$ 62,580.85	\$ 62,580.85	240	\$ 308,323.52	Lump sum now - Age 40	\$ 62,580.85	\$ 62,580.85	300	\$ 459,354.47	Lump sum now - Age 40	\$ 62,580.85	\$ 62,580.85	360	\$ 684,367.28
Monthly Payment - Age 4	\$ 378.08	\$ 90,740.16	240	\$ 224,183.86	Monthly Payment - Age 4	\$ 378.08	\$ 113,425.20	300	\$ 361,964.98	Monthly Payment - Age 4	\$ 378.08	\$ 136,110.24	360	\$ 567,237.60
Monthly Payment - Age 6	\$ 1,292.43	\$-	0	\$-	Monthly Payment - Age 6	\$ 1,064.35	\$ 63,861.00	60	\$78,726.46	Monthly Payment - Age 6	\$ 1,064.35	\$ 127,722.00	120	\$196,016.74
Monthly Payment - Age 6	\$ 1,938.68	\$-	0	\$-	Monthly Payment - Age 6	\$ 1,938.68	\$-	0	\$-	Monthly Payment - Age 6	\$ 1,596.56	\$ 95,793.60	60	\$118,092.28
STEP3 - MONTHLY ANNI	JITY PAYMENT.	ATRETIREMENT - T	AXES:											
RETIRE AT 60 YEARS	Monthsto	Second Annuity	First Annuity	Total Annuity	RETIRE AT 65 YEARS	Monthsto	Second Annuity	First Annuity	Total Annuity	RETIRE AT 70 YEARS	Months to	Second Annuity	First Annuity	Total Annuity
	80 Years	Payment	Payment	Payment		80 Years	Payment	Payment	Payment		80 Years	Payment	Payment	Payment
4%Annual Heturn Annui	ybue	0.04	•	0010.00	4%Annual Heturn Annuit	y Due	0.04		AL 050 04	4%Annual Heturn Annuit	y Due	AD 000 40	0.04	AD 0000 40
Lump sum now - Age 40	240	\$840.06	\$ -	\$840.06	Lump sum now - Age 40	180	\$1,252.04		\$1,252.04	Lump sum now - Age 40	120	\$2,092.46	\$ -	\$2,092.46
Monthly Payment - Age 4	240	\$840.32	\$ 3/8.08	\$1,218.41	Monthly Payment - Age 4	180	\$1,437.84	\$ 3/8.08	\$1,815.92	Monthly Payment - Age 4	120	\$2,656.76	\$ 3/8.08	\$3,034.85
Monthly Payment - Age 6	240	\$0.00	\$ 1,292.43	\$1,292.43	Monthly Payment - Age 6	180	\$521.96	\$ 1,064.35	\$1,586.31	Monthly Payment - Age 6	120	\$1,586.77	\$ 1,064.35	\$2,651.12
Monthly Payment - Age 6	180	\$0.00	\$ 1,938.68	\$1,938.68	Monthly Payment - Age 6	180	\$0.00	\$ 1,938.68	\$1,938.68	Monthly Payment - Age 6	120	\$1,0/1.68	\$ 1,596.56	\$2,668.24
6%Annual Return Annuit	y Due	0.06		÷	6%Annual Return Annuit	y Due	0.06			6%Annual Return Annuit	y Due		0.06	** *** ***
Lump sum now - Age 40	240	\$1,4/6./4	\$ -	\$1,4/6./4	Lump sum now - Age 40	180	\$2,346.19	\$ -	\$2,346.19	Lump sum now - Age 40	120	\$2,686.78	\$ -	\$2,686.78
Monthly Payment - Age 4	240	\$1,251.54	\$ 378.08	\$1,629.62	Monthly Payment - Age 4	180	\$2,210.99	\$ 378.08	\$2,589.07	Monthly Payment - Age 4	120	\$2,720.94	\$ 378.08	\$3,099.03
Monthly Payment - Age 6	240	\$0.00	\$ 1,292.43	\$1,292.43	Monthly Payment - Age 6	180	\$626.65	\$ 1,064.35	\$1,691.00	Monthly Payment - Age 6	120	\$1,249.63	\$ 1,064.35	\$2,313.98
Monthly Payment - Age 6	180	\$0.00	\$ 1,938.68	\$1,938.68	Monthly Payment - Age 6	180	\$0.00	\$ 1,938.68	\$1,938.68	Monthly Payment - Age 6	120	\$798.05	\$ 1,596.56	\$2,394.61
8%Annual Return Annuit	y Due	0.08			8%Annual Return Annuit	y Due	0.08			8%Annual Return Annuit	y Due		0.08	
Lump sum now - Age 40	240	\$2,561.86	\$ -	\$2,561.86	Lump sum now - Age 40	180	\$4,360.76	\$ -	\$4,360.76	Lump sum now - Age 40	120	\$5,686.41	\$-	\$5,686.41
Monthly Payment - Age 4	240	\$1,862.75	\$ 378.08	\$2,240.83	Monthly Payment - Age 4	180	\$3,436.22	\$ 378.08	\$3,814.30	Monthly Payment - Age 4	120	\$3,425.93	\$ 378.08	\$3,804.01
Monthly Payment - Age 6	240	\$0.00	\$ 1,292.43	\$1,292.43	Monthly Payment - Age 6	180	\$747.37	\$ 1,064.35	\$1,811.72	Monthly Payment - Age 6	120	\$1,183.88	\$ 1,064.35	\$2,248.23
Monthly Payment - Age 6	180	\$0.00	\$ 1,938.68	\$1,938.68	Monthly Payment - Age 6	180	\$0.00	\$ 1,938.68	\$1,938.68	Monthly Payment - Age 6	120	\$713.24	\$ 1,596.56	\$2,309.80

RETIRE AT 60 YEARS	Months to	Total Annuity	Total	RETIRE AT 65 YEARS	Monthsto	Total Annuity	Total	RETIRE AT 70 YEARS	Months to	Total Annuity	Total	
	60-80 Years	Payment	Payments	No. 199	65-80 Years	Payment	Payments	- N	70-80 Years	Payment	Payments	
4% Annual Return Annuity	/Due			4% Annual Return Annuit	N. 100		4% Annual Peturn Annuity Due					
Lump sum now - Age 40	240	\$840.06	\$201,615.45	Lump sum now - Age 40	180	\$1,252.04	\$225,366.59	Lump sum now - Age 40	120	\$2,092.46	\$251,095.18	
Monthly Payment - Age 4	240	\$1,218.41	\$292,417.61	Monthly Payment - Age 4	180	\$1,815.92	\$326,865.62	Monthly Payment - Age 4	120	\$3,034.85	\$364,181.68	
Monthly Payment - Age 6	240	\$1,292.43	\$310,182.00	Monthly Payment - Age 6	180	\$1,586.31	\$285,536.36	Monthly Payment - Age 6	120	\$2,651.12	\$318,134.13	
Monthly Payment - Age 6	180	\$1,938.68	\$348,962.40	Monthly Payment - Age 6	180	\$1,938.68	\$348,962.40	Monthly Payment - Age 6	120	\$2,668.24	\$320,189.13	
6% Annual Return Annuity Due				6% Annual Return Annuit	y Due	0		6% Annual Return Annuity Due				
Lump sum now - Age 40	240	\$1,476.74	\$354,418.09	Lump sum now - Age 40	180	\$2,346.19	\$422,313.74	Lump sum now - Age 40	120	\$2,686.78	\$322,413.56	
Monthly Payment - Age 4	240	\$1,629.62	\$391,108.64	Monthly Payment - Age 4	180	\$2,589.07	\$466,033.08	Monthly Payment - Age 4	120	\$3,099.03	\$371,883.02	
Monthly Payment - Age 6	240	\$1,292.43	\$310,182.00	Monthly Payment - Age 6	180	\$1,691.00	\$304,379.25	Monthly Payment - Age 6	120	\$2,313.98	\$277,678.17	
Monthly Payment - Age 6	180	\$1,938.68	\$348,962.40	Monthly Payment - Age 6	180	\$1,938.68	\$348,962.40	Monthly Payment - Age 6	120	\$2,394.61	\$287,352.86	
8% Annual Return Annuity	/Due		A	8% Annual Return Annuit	y Due			8% Annual Return Annuit	y Due			
Lump sum now - Age 40	240	\$2,561.86	\$614,846.96	Lump sum now - Age 40	180	\$4,360.76	\$784,936.58	Lump sum now - Age 40	120	\$5,686.41	\$682,369.53	
Monthly Payment - Age 4	240	\$2,240.83	\$537,799.03	Monthly Payment - Age 4	180	\$3,814.30	\$686,574.32	Monthly Payment - Age 4	120	\$3,804.01	\$456,481.50	
Monthly Payment - Age 6	240	\$1,292.43	\$310,182.00	Monthly Payment - Age 6	180	\$1,811.72	\$326,109.35	Monthly Payment - Age 6	120	\$2,248.23	\$269,787.19	
Monthly Payment - Age 6	180	\$1,938.68	\$348,962.40	Monthly Payment - Age 6	180	\$1,938.68	\$348,962.40	Monthly Payment - Age 6	120	\$2,309.80	\$277,175.82	

	Payment	Number of	Total		Present Value				
		Payments	Payments						
4% Annual Return Compounded Monthly				0.04	27				
Lump sum now - Age 40	\$ 73,010.99	1	\$ 73,010.99	\$ 73,010.99	Age 40				
Monthly Payment - Age 4	\$ 378.08	480	\$ 181,480.32	\$90,765.58	Age 40				
Monthly Payment - Age 6	\$ 1,292.43	240	\$ 310,182.00	\$213,989.30	Age 60	\$96,279.59	Age 40		
Monthly Payment - Age 6	\$ 1,938.68	180	\$ 348,962.40	\$262,967.96	Age 65	\$96,901.52	Age 40		
6% Annual Return Compounded Monthly				0.06					
Lump sum now - Age 40	\$ 73,010.99	1	\$ 73,010.99	\$ 73,010.99	Age 40				
Monthly Payment - Age 4	\$ 378.08	480	\$ 181,480.32	\$69,059.43	Age 40				
Monthly Payment - Age 6	\$ 1,292.43	240	\$ 310,182.00	\$181,299.67	Age 60	\$54,769.93	Age 40		
Monthly Payment - Age 6	\$ 1,938.68	180	\$ 348,962.40	\$230,889.10	Age 65	\$51,711.23	Age 40		
8% Annual Return Compo	ounded Mont	hly		0.08					
Lump sum now - Age 40	\$ 73,010.99	1	\$ 73,010.99	\$ 73,010.99	Age 40				
Monthly Payment - Age 4	\$ 378.08	480	\$ 181,480.32	\$54,738.70	Age 40				
Monthly Payment - Age 6	\$ 1,292.43	240	\$ 310,182.00	\$155,545.06	Age 60	\$31,571.20	Age 40		
Monthly Payment - Age 6	\$ 1,938.68	180	\$ 348,962.40	\$204,217.05	Age 65	\$27,821.82	Age 40		