Retirement Calculator Worksheet

> **Student Instructions:** This worksheet will help you understand how different variables affect retirement outcomes. You'll explore multiple scenarios, perform calculations, and analyze the results to better understa the factors that influence retirement planning.

Part 1: Understanding Key Retirement Variables

Before creating your retirement scenarios, review these key variables that impact retirement calculations:

Variable	Description	Impact on Retirement Outcomes
Current Age	Your age today	Determines length of time for investments to grow; your starters benefit more from compound growth
Retirement Age	Age you plan to stop working full-time	Affects both contribution period and withdrawal period; retiring later means more time to save and fewer years fund
Life Expectancy	Age to which you plan financially	Determines how long your savings need to last; plannin age 90-95 is often recommended
Current Savings	Amount already saved for retirement	Starting point for future growth; more initial savings mea more potential compounding
Monthly Contribution	Amount added to retirement accounts monthly	Directly impacts accumulation; higher contributions leac larger retirement funds
Rate of Return	Expected annual investment return percentage	Significantly impacts growth; higher returns compound r dramatically over time
Inflation Rate	Expected annual increase in prices	Reduces purchasing power; retirement needs must acc for inflation

Common Retirement Formulas:

1. **Rule of 72** (approximate time to double money): 72 ÷ Rate of Return = Years t Double

2. **25X Rule** (retirement savings target): Annual Expenses × 25 = Retirement Savi Goal

3. **4% Rule** (sustainable withdrawal): Retirement Savings × 0.04 = Annual Withdra Amount

Part 2: Multiple Scenario Analysis

Create three different retirement scenarios by changing key variables. First, complete the baseline scenario, create two variations.

Scenario 1: Baseline Retirement Plan

Input Variables:

Current Age:

Retirement Age:

Life Expectancy:

Current Savings: $

Monthly Contribution: $

Rate of Return: %

Inflation Rate: %

Calculation Results:

Years Until Retirement:

Years in Retirement:

Total Contributions: $

Projected Retirement Savings: $

Monthly Income (4% Rule): $

Inflation-Adjusted Monthly Income: $

Scenario 2: Earlier Retirement

Adjust your retirement age to be 5 years earlier than your baseline. Keep other variables the same or adjus
needed.

Input Variables:

Current Age:

Retirement Age:

Life Expectancy:

Current Savings: $

Monthly Contribution: $

Rate of Return: %

Inflation Rate: %

Calculation Results:

Years Until Retirement:

Years in Retirement:

Total Contributions: $

Projected Retirement Savings: $

Monthly Income (4% Rule): $

Inflation-Adjusted Monthly Income: $

To maintain the same retirement income, what monthly contribution would be needed?

Scenario 3: Higher Return Rate

Adjust your rate of return to be 2% higher than your baseline scenario. Keep other variables the same as y baseline.

Input Variables:

Current Age:

Retirement Age:

Life Expectancy:

Current Savings: $

Monthly Contribution: $

Rate of Return: %

Inflation Rate: %

Calculation Results:

Years Until Retirement:

Years in Retirement:

Total Contributions: $

Projected Retirement Savings: $

Monthly Income (4% Rule): $

Inflation-Adjusted Monthly Income: $

How much additional retirement savings do you achieve with the higher return rate?

Part 3: Impact of Starting Early

This exercise demonstrates the powerful impact of starting retirement savings early.

The Cost of Waiting Calculation

Compare two savers with identical retirement ages and contribution amounts, but different starting ages:

	Early Starter	Late Starter
Starting Age	20	30
Retirement Age	65	65
Monthly Contribution	$200	$200
Annual Return Rate	7%	7%
Years Contributing	45	35
Total Amount Contributed		
Final Account Balance at Retirement		

Difference in final balance:

How much more would the late starter need to contribute monthly to reach the same balance as the early starter?

Part 4: Analysis and Reflection

1. Which variable had the biggest impact on your retirement outcomes? Why?

2. What surprised you most when comparing your different scenarios?

3. How did the "cost of waiting" calculation affect your perspective on retirement planning?

4. Based on these calculations, what changes might you make to your retirement strategy?

Note: This worksheet is for educational purposes only and does not constitute financial advice. For specific financial guid consult with a qualified financial professional.

PFL Academy - Chapter 6.1: Planning for Retirement