MAP4CI – Annuities and Budgeting REVIEW

Useful formulae:

$A = P(1+i)^n$ $\qquad$ I = P r t $\qquad$ A = P + I

$PV = A(1+i)^{-n}$ or $PV = \dfrac{A}{(1+i)^n}$ $\qquad$ $A = R\left(\dfrac{(1+i)^n - 1}{i}\right)$

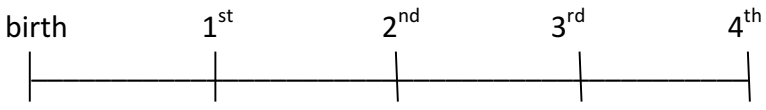
1) a) You have a car loan. You make payments of $270 every month for 5 years. You made a down payment of $1000 when you bought the car. What is the total amount you paid for the car?

b) If the cash price for the car was $14 500, how much did you paid in interest?

2) Sam wants to save $5000 for a cruise. He can invest his savings at 4.3%/a compounded monthly. How much money does he need to invest now, if he wants to go on the cruise 3 years from now? i =

3) If your grandparent made a deposit of $500 the day you were born and another $500 every year on your birthday into an investment that paid 5.5% interest per year, compounded annually. Determine the value of this investment in on your 1st birthday.

4) If your grandparent made a deposit of $100 the day you were born and another $100 every year on your birthday into an investment that paid 7.5% interest per year, compounded annually. Determine the value of this investment in on your 4^{th} birthday. Use a timeline to help you. Check with the appropriate annuity formula.



5) You want to save money to take a trip at the end of the year and need to put a monthly budget together to determine if you will have enough saved. Design a budget for yourself given the following information. State the size of your budget deficit or a budget surplus each month. How much will you have saved in one year?
    - monthly gross income $3300, monthly deductions $800 … Net Income =
    - rent (utilities included) of $750/month
    - food - $80 weekly
    - cable, internet and phone - $1440 annually
    - car loan - - $285/month
    - clothes - $1800 annually
    - car insurance - $990 every 6 months
    - entertainment and sports - $200 monthly
    - miscellaneous (includes gas for car) - $190 bi-weekly

Monthly Budget

Income		
	Total Income:	
Expenses		
	Fixed	
	Total Fixed Expenses:	
	Variable	
	Total Variable Expenses:	
	Total Expenses:	
	Budget Surplus or Deficit:	

Annual Savings / Loss= _____