

## Finance Project – College Tuition

*The project must be typed including a cover sheet with your name, class period, school, teacher name and title!*

### I. Choosing a College

Choose one of each of the following types of 4-year colleges:

A. Tuition less than \$16,000/yr

B. Tuition more than \$16,000/yr

**Tuition** is the cost for taking classes only and does not include housing, books, and other living expenses.

### II. Cost (Note: all calculations for parts II, III, IV, and V should be done for BOTH colleges.)

A. State the cost of tuition (only) at both colleges for the current school year. Print or copy the page and include the source for your information. If you cannot print the page, note the URL in your typed report.

B. Calculate the potential cost for the four years of tuition including inflation. You will have to calculate the % increase (see below) due to inflation for the last 2 or 3 years and then project the cost for when you start college (remember, for seniors that would be fall of this year, juniors would be fall of next year, etc.). If previous years' tuition costs are not available to calculate the % increase, use 6%. Be sure to state that this is the percentage you are using.

*Show all work to find the cost of tuition at each school for all 4 years!*

To calculate the % increase: 
$$\left( \frac{\text{new} - \text{old}}{\text{old}} \right) * 100$$

Explain in detail in parts III and IV how you used the TVM Solver. Include the following variables and star (\*) the variable for which you are solving:

**N:** Number of payments, total

**I%:** Interest rate

**PV:** Previous Value

**PMT:** Payment amount made regularly

**FV:** Future value

**P/Y:** Payments per year, usually 12

**C/Y:** Compounding periods per year, usually 12

**PMT:** END BEGIN: Will the payments be due at the beginning or end of the month. You don't need to include this item for Part III.

### III. Assume that the money to pay for both colleges was invested in a local CD at 3.5% APR (interest compounded annually). Calculate how much your parents should have invested in one lump sum at your birth to cover

the potential cost for all four years of college. This means you must have sufficient funds to cover all 4 years of tuition by the time you are 18 years old!

IV. Repayment: **Answer Parts IV and V for BOTH colleges**

**A. Find a reasonable interest rate from a local banking institution, which you can find online. State the name of the local bank and include the printout from the internet (or the URL if you can't print).**

**B. Assume that no money was invested at your birth, so you would take out a loan to pay for your entire tuition. How much would you have to pay, at the beginning of each month, at the interest rate you found, to pay off the loan in 10 years?**

V. Find the total cost of the loan. Determine how much of the total repayment was interest and how much of it was from the principal (tuition). Find both the actual amounts, and the percentages. Show your work.

Conclusion

**Type your conclusion, in complete sentences from 1/2 page to a full page, of what you have learned from this experience. How will you use what you have learned? What other uses could the TVM Solver have besides college tuition?**

Grading Rubric:

- |   |                          |
|---|--------------------------|
| 1. Typed cover page   | _____ (2 points)         |
| 2. Cost for 2006-2007 tuition: (Sec IIa)                                | _____ (3 points)         |
| 3. Potential cost for 4 years tuition (show work)(Sec IIb)              | _____ (4 points)         |
| 4. Money invested at birth to cover potential cost (show work)(Sec III) | _____ (4 points)         |
| 5. Monthly payment to pay off loan from the bank(name source)(Sec IV)   | _____ (4 points)         |
| 6. Total cost (Breakdown to principal and interest) (Sec V)             | _____ (4 points)         |
| 7. Conclusion   | _____ (4 points)         |
| <b>TOTAL</b>  | <b>_____ (25 points)</b> |