

# Group Project Worksheet

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College Funds

Group Members:

This worksheet must be turned in with the summary paper. Complete each question, and if you are asked to make a computation, show all of your work. Write neatly and legibly. Points may be deducted if answers are incorrect, incomplete, or messy.

## Calculating the Cost

Putting a child through college is a huge expense. In this project, you will explore the cost of college for your children and an investment strategy to cover the costs. Suppose that you have two children, Mirabelle and Reuben, whom you wish to send to college. Mirabelle will start college in 15 years, and Reuben will start college in 16 years.

1. For each child, select a different university you would like him or her to attend. Find the current annual cost of room and board in a dormitory and tuition at each school.

(a) \_\_\_\_\_ (Mirabelle)

- Annual room and board: \_\_\_\_\_
- Tuition: \_\_\_\_\_
- Yearly total: \_\_\_\_\_

(b) \_\_\_\_\_ (Reuben)

- Annual room and board: \_\_\_\_\_
- Tuition: \_\_\_\_\_
- Yearly total: \_\_\_\_\_

2. Suppose the current cost of an item is  $C$ . Write down a formula to find the cost of this item after  $Y$  years assuming a constant 3% inflation rate during this period. Explain.

3. Using the formula from the previous question, how much will you have to pay in total for Mirabelle's first year of school?

4. Suppose that Mirabelle and Reuben each take five years to complete their degrees. Fill in the table below.

Years of College	Cost for Mirabelle	Cost for Reuben	Total Cost
1		N/A	
2			
3			
4			
5			
6	N/A		

## Investment Plan

Next, we need to figure out how much to deposit each month in an investment plan to pay for your children's expenses. We'll work out one investment strategy below.

1. Contact two different financial institutions to find the APR for a savings account. Choose the institution with the higher APR to answer the subsequent questions.

(a) Financial institution: \_\_\_\_\_

• APR: \_\_\_\_\_

(b) Financial institution: \_\_\_\_\_

• APR: \_\_\_\_\_

2. Suppose you open one savings account for each year you will have at least one child in college. Savings account #1 will hold the money for the first year of college expenses, when only one child will be attending college. Savings account #2 will hold the money for the second year of college expenses, when both children will be attending college, and so on. You will have six savings accounts in all. From your work in the previous section, you know how much you will want in savings account #1 by the time Mirabelle begins college. Compute the monthly payment required to reach this goal.

3. Compute the monthly payments required for each of the savings accounts, then add the monthly payments together to find your total monthly payment.

- Account #1
  - Monthly payment: \_\_\_\_\_
- Account #2
  - Monthly payment: \_\_\_\_\_
- Account #3
  - Monthly payment: \_\_\_\_\_
- Account #4
  - Monthly payment: \_\_\_\_\_
- Account #5
  - Monthly payment: \_\_\_\_\_
- Account #6
  - Monthly payment: \_\_\_\_\_
  
- Monthly total for the first 15 years: \_\_\_\_\_
  
- Monthly total for year 16: \_\_\_\_\_
  
- Monthly total for year 17: \_\_\_\_\_
  
- Monthly total for year 18: \_\_\_\_\_
  
- Monthly total for year 19: \_\_\_\_\_
  
- Monthly total for year 20: \_\_\_\_\_

4. Discuss whether the total you found will be a reasonable amount for you to invest each month.
5. Compute the total amount you will have invested and compare this to the total cost of your children's educations.

6. Discuss (in detail) the benefits and drawbacks of this investment plan. Can you think of a better plan?