Save Me!

While Samuel and Juan Carlos had been friends since kindergarten, they could not have been more different from each other when it came to their savings habits. Since he got his working papers at 14, Samuel had worked part-time jobs wherever he could find them. He worked at the local burger joint, for a local landscaper and also bagged groceries at the organic food store.

Samuel had seen his older brothers and sisters go down the same path of part-time work. He came from a family of six that believed in the importance of a college education but didn't have the financial resources to cover the ever-increasing costs. He remembers vividly the conversation he had with his Mom when he was about ten. She told him that given the family's financial situation, he would need to work hard to be able to afford college. He still remembered that conversation seven years later and had taken her words to heart.

Now just two years from starting college, Samuel wanted to figure out where he stood and what the future would look like. A fastidious record keeper, Samuel had kept a running tally of his earnings and savings over the past three and a half years:

Age	Annual Gross Pay	Annual Savings
14	$2,000	$1,000
15	$4,000	$3,300
16	$5,500	$4,500
17 (data for 6 months)	$6,500	$5,500

His hourly rate had remained remarkably steady at about $10/hour over the years but he had seen the hours he worked increase and his savings too. Yet, as he started his junior year, he didn't feel as happy about his current situation as he should have. Here were a few of his troubles:

- Despite his large and growing savings account, he wasn't sure when enough would be enough. He read headlines about $60,000 annual tuition and didn't believe he would ever have enough. This discouraged him!

- His grades had started to suffer as he found it more and more difficult to juggle these jobs and carry a full course load. He thought that competitive colleges would take into account his work schedule so he was less concerned about his grade point average dropping from 3.8 to 3.0 (out of 5).

- He didn't feel like he was seeing his friends enough. Between work and school, he didn't have enough time and then when he did have time, he didn't feel like spending money. His friends tired of asking him to go the movies, out for dinner or to the indoor rock climbing gym because his answer was always "no."

- His parent's car had broken down and they asked him for $1,000 to cover the cost of repairs.

Answer this:

1. Do you think that Samuel is a good saver? Use data to support your answer.

2. As Samuel's friend, help him think through each of the items that is troubling him:
    a. When is enough going to be enough? **or** How is he ever going to afford college?

    b. Academic GPA trending down

    c. Social life

d. Parents asking for money

Juan Carlos's situation could not have been more different than Samuel's. He grew up in a family of four and lived in a spacious home with a yard big enough to host the neighborhood touch football game.

He got decent grades in school and always assumed that college would be taken care of because both his Mom and Dad went to college, and they were constantly harping on the importance of a college education. As the oldest child in the family, he could not anticipate what was coming, when his Mom sat down with him at the beginning of his junior year in high school:

> "We think it is important that you feel invested in your education, Juan Carlos, and want you to know that we are happy to cover most of the cost of your college education. However, we believe it is important that you be responsible for about $4,000 for each year you are in college."

Juan Carlos couldn't believe what he was hearing:

> "$4,000 a year! I don't have $300 in my savings account today. You know how hard it is for me to save money from my part-time gigs. Why did you wait so long to tell me? There is no way that I can do this. I don't have a steady job that can produce that kind of income. I guess that I won't be going to college after all!"

His mom, nonplussed by his reaction, gave him a week to develop a plan to make this happen. Once he had calmed down, Juan Carlos's first call was to his super saver friend, Samuel. Upon hearing of his predicament, Samuel hopped on his bike and headed over to help out his friend. As he rode through town, he mulled over the questions he would ask Juan Carlos to develop a plan:

Answer this:

3. What are at least FIVE questions that Samuel should ask Juan Carlos to help them develop a plan?

There were so many questions that Samuel was throwing at Juan Carlos that he started to feel lightheaded. How could he organize all the various scenarios that they were discussing and turn it into a meaningful plan? Ah, thank goodness for Samuel's spreadsheet skills, which would enable them to change assumptions and immediately see if Juan Carlos could meet his goal of earning $4,000 per year for college.

As Samuel tapped away on the keyboard.....

Juan Carlos stared over his shoulder and the ideas just started flowing...

Answer this:
Samuel developed a spreadsheet[1] with some basic assumptions about what Juan Carlos's work and saving plan could be. **Make a copy of the sheet and plug in the ASSUMPTIONS (in the highlighted yellow rows) based on the questions below**. Then, answer the following questions after reviewing the spreadsheet:

4. Based on the assumptions that Juan Carlos works **10 hours/week during school year** and **40 hours/week during the summer** and **saves 20% of his income**, will he meet his $4,000 goal for every year in college?

5. What year will Juan Carlos run short based on Samuel's assumptions?

Here is an example of what your spreadsheet should look like to complete Questions 4 and 5:

[1] How To: Entering & Editing Data

	ASSUMPTIONS						
9	Hours/week during school year	10					
10	Hours/week during the summer	40					
11	Saves __% of his income	20%					
12							
13		HS Junior Year	HS Senior Year	College Frosh	College Soph	College Junior	College Senior
14							
15	**School Year**						
16	Hours worked per week	10	10	10	10	10	10
17	Total Weeks in School	40	40	40	40	40	40
18	Pay per hour	$10.00	$10.00	$10.00	$10.00	$10.00	$10.00
19	**TOTAL SCHOOL YEAR PAY**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**	**$4,000**
20							
21	**Summer (prior to given school year)**						
22	Hours worked per week		40	40	40	40	40
23	Total Weeks in Summer		12	12	12	12	12
24	Pay Per Hour		$10.00	$10.00	$10.00	$10.00	$10.00
25	**TOTAL SUMMER PAY**		**$4,800**	**$4,800**	**$4,800**	**$4,800**	**$4,800**
26							
27	**TOTAL PAY**	**$4,000**	**$8,800**	**$8,800**	**$8,800**	**$8,800**	**$8,800**
28							
29	Savings rate	20%	20%	20%	20%	20%	20%
30	**Annual Savings**	**$800**	**$1,760**	**$1,760**	**$1,760**	**$1,760**	**$1,760**
31							
32	**Cumulative Savings**	**$800**	**$2,560**	**$4,320**	**$2,080**	**-$160**	**-$2,400**
33							
34	**Annual Needs in College**			$4,000	$4,000	$4,000	$4,000
35							
36	**Cumulative Savings After Needs Met**			**$320**	**-$1,920**	**-$4,160**	**-$6,400**
37							
38				OK	SAVE MORE	SAVE MORE	SAVE MORE

Adjust these three factors

See if you will be able to save enough

Next, Juan Carlos and Samuel started brainstorming different scenarios using the same Google sheet.

Answer this:
For each question below, assume Juan Carlos is **earning $10/hour**.

6. "It would be great if I could work **40 hours/week in the summer** but **0 hours/week during the school year**, so I can focus on my studies. What would my **savings rate** need to be to accomplish this?"

7. "What if I just worked **20 hours/week during the summer, 0 hours/week during the school year,** but **saved 100%** of my income? Would I meet my savings goal?"

8. “Let’s be honest -- I don’t have your savings habits, Samuel! Let’s put in a **savings rate of 20%.** I know that means that I will need **40 hours/week in the summer**, and I am guessing that I will need to work during the school year too. How many hours do you think I will need to work **during the school year**?”

9. “Are there any problems with this model that you created, Samuel?” List at least three potential flaws with the savings model.

10. “It is clear to me that my **savings rate** is so important if I want to minimize how much I need to work. Any ideas on how I can convince myself to save more?” Samuel’s advice to Juan Carlos: “Google it and figure it out for yourself!”

After doing your own online research, jot down at least three ideas you think can help Juan Carlos save more.

Well, the time had come...Juan Carlos had seemed so lost a week ago when his Mom had told him about her financial expectations for his college years. Now, supported by Samuel's awesome spreadsheet skills and having spent lots of time thinking and researching, Juan Carlos had developed a savings plan that he was proud to deliver to his parents.

Answer this:

11. Develop a set of bullet points to explain the various elements of Juan Carlos's savings plan. Be sure to include key assumptions about **hours worked during school years and summers**, **savings rate** and **hourly wage**. Also, be prepared to answer the question his parents will likely ask: "You have never saved before! How are you going to save so much now?"