

DECISIONS, DECISIONS, DECISIONS: SUMMER ACTIVITIES FOR ANNA!

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Anna Swanson will soon be home for the summer. Her parents John and Carol are trying to figure out the best way to keep Anna busy for the summer using a \$400 gift from her grandmother. Given their budget, John and Carol must weigh the cost, benefits, and break-even points of options like a YMCA pool pass, amusement park pass, or various summer camps and try to find the best option or options that will keep young Anna busy during the summer.

INTRODUCTION

School would be out soon and Anna would be home from fourth grade for the summer. Although Anna was looking forward to summer vacation, parents John and Carol Swanson were faced with a dilemma. As two working parents, how could they keep young Anna entertained for the summer? John worked full-time (8am–5pm, Monday–Friday) and Carol worked part-time (flexible, but typically Monday–Friday, 11–2 and some evenings), so they needed to find some fun summer activities for Anna during the day when they were working.

They knew they would be at the beach for a family reunion one week during the first week in July and then at the river for another family reunion during the first week in August. After some brainstorming and background research on the Internet, they came up with a few ideas for the rest of the summer.

Carol said, “John, here’s a good option. The local YMCA, a not-for profit organization, has a pool with a water slide for children and their families. This would be great! It’s only located two miles from our house. Since we are so close, we could drop off Anna during the day at the pool and she can play on the slides and in the pool with her friends. She loves to swim and the water slides are awesome. It’s only two miles from our house, so we wouldn’t have to drive very far to pick her up. Plus, they offer a pool pass for the entire family for the summer, so we could join after work.”

John responded, “That’s an interesting option and certainly something to consider. Some of Anna’s friends also have passes to the amusement park. It’s located about 20 miles away. Anna loves rollercoasters, and the amusement park also has a water park, with even better water slides than the YMCA. Since we have flexible hours, maybe you can take her there during the week. She can bring some of her friends and some of the days her friends’ parents may also be able to take her.”

Carol continued, “Another option are some local summer camps. The county offers a few summer camps that last a few hours during the day during specific weeks. I’ll look into some of those as well.”

John said, “Ok, this sounds good. Your mom gave us the \$400 to use for summer activities for Anna.” Carol responded, “Ok, sounds like the next step is to look into the price of the YMCA, the price of the amusement park, and also find a few local summer camps with their prices as well. Let’s do some more research and we can sit down again in a few days.”

The next week, John and Carol sat down at the kitchen table to talk about what they found. Carol started, “Ok, I contacted the YMCA and the price of the pool pass is \$340 per family for the summer. That basically means that if we pay \$340, then all three of us have unlimited use of the YMCA pool and water slides for the entire summer. Rather than buying the pass, the YMCA also offers an option to pay per visit. In this case, the YMCA charges \$10 per person before 5pm, and \$5 per person after 5pm. My guess is that given your work schedule and my work schedule, I think it’s likely that half of the time only Anna and I will go to the pool during the day before 5pm, and about a quarter of the visits, I think the three of us will go during the day before 5pm. My guess is that, given your work schedule, all three of us will be able to take advantage of the \$5 discounted rate by waiting until 5pm to go about a quarter of the time.”

After listening to Carol, it was John’s turn. John said, “Ok, here’s what I found. Unlike the YMCA, which charges per family, the amusement park charges per person. The park charges \$100 per adult for the summer and \$65 per child for the summer. If we don’t buy the pass, we would pay \$65 per adult and \$50 for Anna each time we went to the park.”

Carol continued, “I’ve also found three summer camps that seem to fit our schedule. There is a cooking camp that costs \$75 and lasts from 12pm–3pm for one week in mid-July. I found another camp, a theater camp, that also lasts from 12–3 in late July and a nature camp that lasts from 9–4 in late June. The theater camp costs \$60 and the nature camp costs \$100. Each of these camps is five miles away from our

house, so they're all pretty close. Also, all three of them include lunch, snacks, and drinks!"

TABLE 1
YMCA POOL MEMBERSHIP PRICING

Pricing Type	Price
Family pool membership	\$340
Price per person, before 5pm	\$10
Price per person, after 5pm	\$5

TABLE 2
EXPECTED POOL USAGE BY THE SWANSONS

Family members	Frequency of usage
Carol and Anna before 5pm	50% of the time
Carol, Anna, and John before 5pm	25% of the time
Carol, Anna, and John after 5pm	25% of the time

TABLE 3
AMUSEMENT PARK PRICING

Type of pass	Cost
Season pass cost	\$100 per adult, \$65 per child
Price of single ticket admission	\$65 per adult, \$50 per child

TABLE 4
SUMMER CAMPS

Camp	Cost	Dates/Times
Cooking camp	\$75	Mid July
Theater camp	\$60	Late July
Nature camp	\$100	Late June

After Carol presented her options, John replied, "Ok, sounds good. So, what do you think we should do?"

Carol thought about it a bit more and said, "Well, our neighbors the Hendersons used the pool pass last year. They have a similar work schedule as we do. I think three of their family members used the pool about half the time before 5pm, four of the family members used the pool about a quarter of the time before 5pm, and then about another quarter of the time, all four family members went after 5pm. They seemed to enjoy the pool! Plus, Anna loves the water; a lot of her friends from the swim team might be there during the day. I think that's what we should do! Let's buy the pool pass and then consider some summer camps as well."

John wasn't so sure and replied, "Yeah, I remember they bought the pool pass. But they have four family members and we only have three. Perhaps we should buy the amusement park pass and then purchase admission to the YMCA pool each time we go, rather than buy the pool pass as well. Then, we can still add in some summer camps." John added, "Plus, if we buy the amusement park pass, we can use the pass at the park during the Halloween Haunt and they even have activities for the winter holidays! So, that means we use can use the pass all year long, not just during the summer like the YMCA pool pass." Also, "We only have \$400 to spend. We can't buy both the pool pass and the amusement park pass."

TABLE 5
EXPECTED POOL USAGE BY THE HENDERSONS

Family members	Frequency of usage
Three people (Kristin, Robbie, and Lexie) before 5pm	50% of the time
Four people (Kristin, Robbie, Lexie, and Paul) before 5pm	25% of the time
Four people (Kristin, Robbie, Lexie, and Paul) after 5pm	25% of the time

Carol responded, "I know Anna would love the amusement park, but it's 20 miles away. Since you work during the day, I would need to take her. Although we all really enjoy the amusement park, I'm not sure I have the time to take her that frequently during the day. Plus, have you seen the food and drink prices? Really expensive. I mean, I know the YMCA has a concession stand, but the food and drink prices at the amusement park are through the roof compared to the YMCA. So, overall, I think the better option is to buy the pass to the YMCA and then to purchase single ticket admission to the amusement park."

John replied, "Well, let's look at the summer camps. You found three. If we buy the pool pass or the pass to the amusement park, we can't do all three summer camps. It's tough because although I think Anna would like the cooking camp and the theater camp, she would really like the nature camp. Perhaps another option is to forego purchasing the YMCA and amusement park passes, and instead purchase single tickets for each of these. This would allow Anna to go to all three summer camps and then we could just take her to the YMCA and/or amusement park on an ad-hoc basis."

Carol replied, "Ok, looks like we have lots of alternatives. I think in any combination of the possible options, we should buy either the YMCA pool pass or the amusement park pass. Plus, my mom gave us the \$400 to use for passes and

summer camps for Anna, so I think she would be a little upset if we didn't use all the money for summer activities."

John agreed, "Yep, we should only consider the combination of alternatives that meet our \$400 budget, no less, no more. Anna really wants us to buy the amusement park pass or the YMCA pass, so, in any combination of alternatives we choose, we should buy either the YMCA pass or the amusement park pass. Since we received some extra money from your mom for summer activities, any extra dollars that we spend on gas or food doesn't count toward the \$400 budget, only the prices of the passes and summer camps."

Carol responded, "Well, we need a plan! Let's list the possible alternatives, the pros, cons, and cost of each alternative and then decide!" John said, "Ok, sounds good! Let's do it."

TABLE 6
CONDITIONS FOR DIFFERENT OPTIONS

Condition
1) Every combination of options must include either the YMCA pool pass or the amusement park pass.
2) Every combination of options must total to the \$400 budget and may not exceed the \$400 budget.