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**Task 1: Comparing Sprayberry Bank to Jackets Bank**


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**Scenario:** You have worked all summer babysitting and have earned a total of \$2,200. You are saving up to buy a car, so you decide to open up a savings account. There are two banks in the area: Sprayberry Bank and Jackets Bank.

**Sprayberry Bank:** charges you \$100 to open the account but gives you an interest rate of 6.5%



**Jackets Bank:** will pay you \$125 each month.

**Hypothesis:** After reading each bank's savings account plan, which bank would you choose to deposit your money? Why did you decide this?




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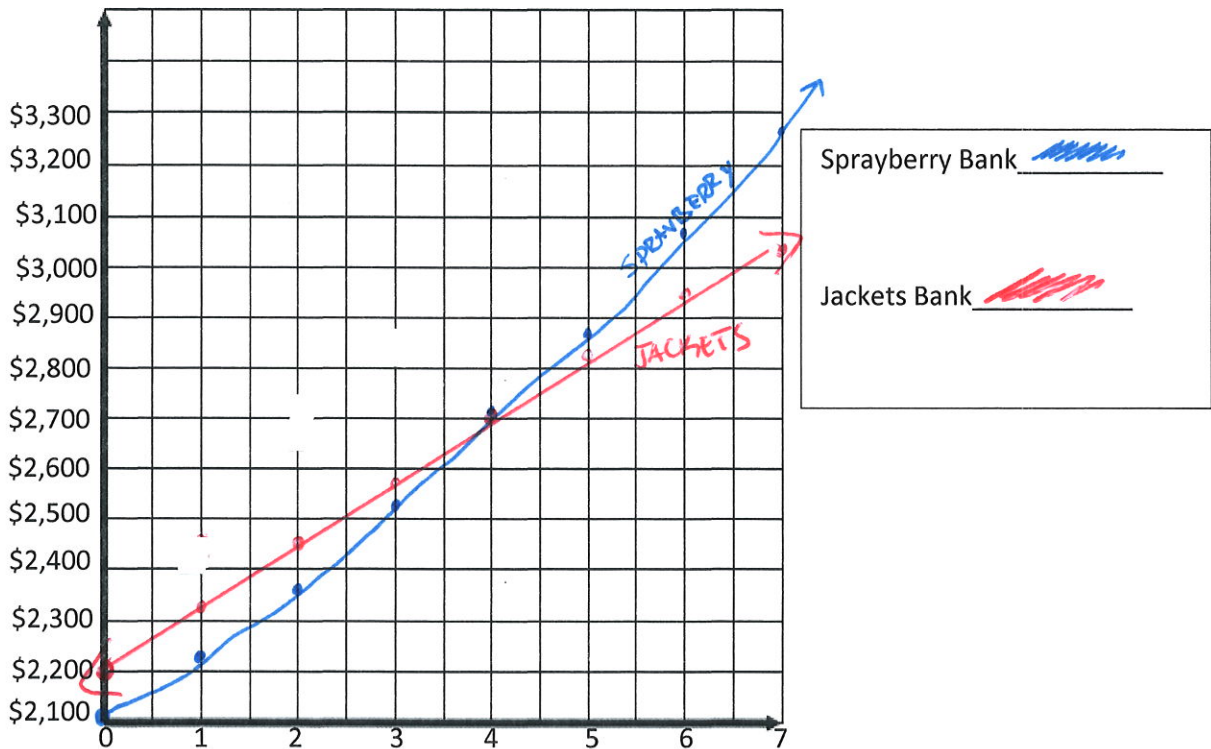
**Experimental Process:**

<b>Sprayberry Bank:</b>		<b>Jackets Bank:</b>	
1. Write a model for the situation. $y = 2100(1.065)^x$		1. Write a model for the situation. $y = 125x + 2200$	
			
2. Make a table of values for the first seven months.		2. Make a table of values for the first seven months.	
Month	Account Balance	Month	Account Balance
1	2236.50	1	2325
2	2381.90	2	2450
3	2536.70	3	2575
4	2701.60	4	2700
5	2877.20	5	2825
6	3064.20	6	2950
7	3263.40	7	3075

Algebra 1

Unit 5- Comparing Functions

3. Graph each set of data from your tables in #2. Please graph each bank in a different color and label your graphs.



**Analysis:**

4. On the very first day you deposit your money, in which bank would you have a higher balance?
  - a. Sprayberry Bank
  - b. Jackets Bank
  
5. Between the first and third months, which bank account has the higher balance?
  - a. Sprayberry Bank
  - b. Jackets Bank
  
6. During which month does Sprayberry Bank begin to have more in the account than Jackets Bank?
  - a. Month 3
  - b. Month 4
  - c. Month 5
  
7. At the end of six months, you decide to reevaluate which bank should hold your money. Based on the table in #2 and the graph in #3, which bank is a better choice?
  - a. Sprayberry Bank
  - b. Jackets Bank

**Conclusion:** Take a look back at your hypothesis. Did you prove yourself right or wrong? Explain.