

Baby Sitting Task

Problem

This summer, Sofia is looking to babysit to make some extra money. She has the choice between babysitting for two families for a month.

- The Gomez Family offered Sofia a flat \$100 stipend for gas money plus \$75 a day to babysit.
- The Sanchez Family had a different approach. Since they wanted to ensure Sofia would stay with them for the entire month, they offered to only pay her whenever she stopped working for them in one lump sum.
 - She would be paid an initial amount of a penny for choosing their family and then her pay would double each day she babysat until she decided to stop babysitting for them or when the month ended.



Gomez Family

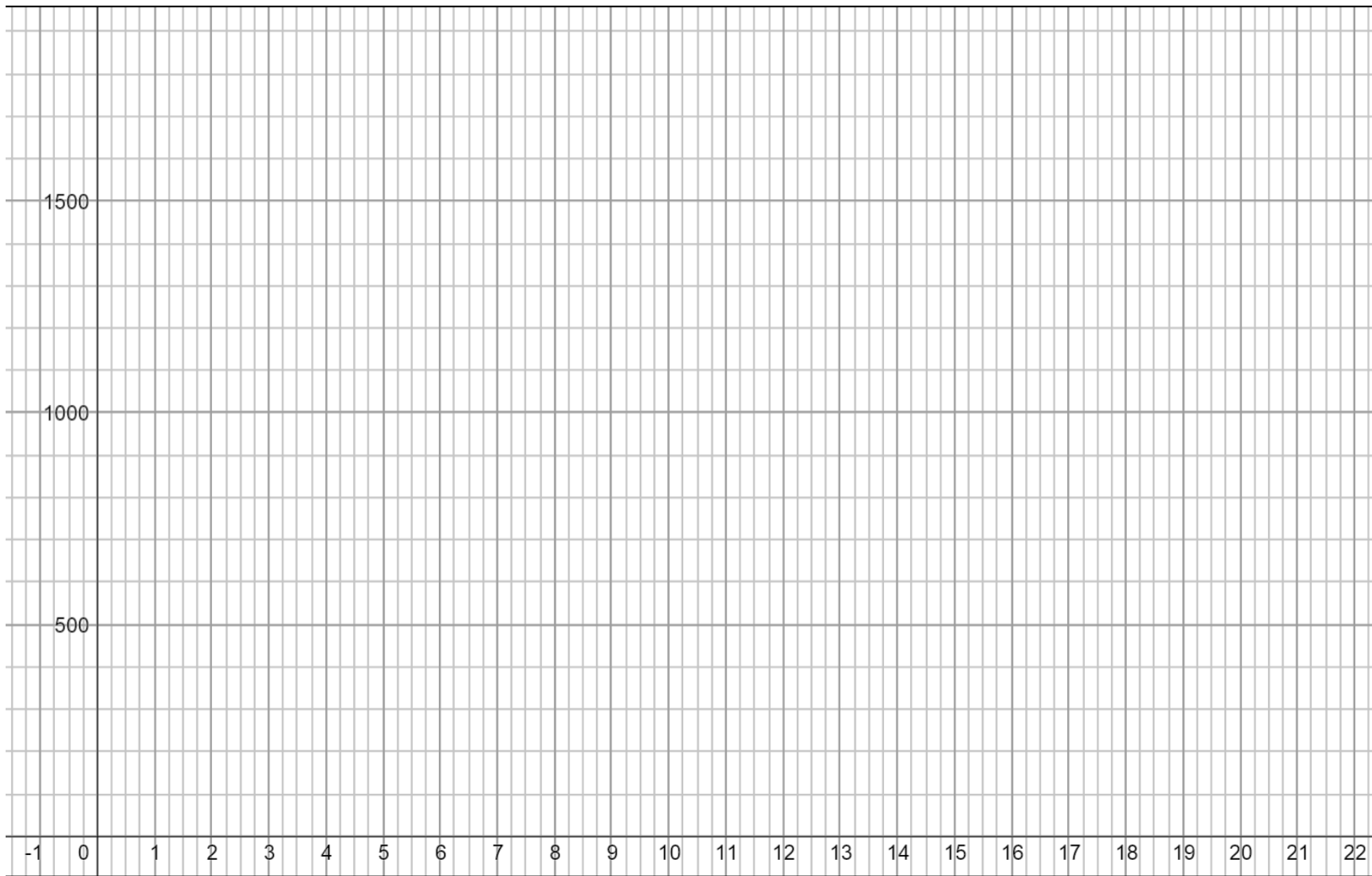
Days	Paid
0	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	
13	
14	
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16	
17	
18	
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20	

Sanchez Family

Days	Paid
0	
1	
2	
3	
4	
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Graphing

Graph the results of your t-table. Label your graphs so we can tell which is the Gomez family and which is the Sanchez family.



Critical Thinking

1. Which family should Sofia work for, assuming she would babysit on weekdays only (5 days in a row)?
2. If Shara could only babysit for the first three weeks, would this change your choice? Why or why not. Justify your answer using good mathematics. "How many days does Sofia have to work for the Sanchez family to make more money than the Gomez family?"
3. Can you create an equation for the Gomez family? Explain what each variable and number represents.
4. Can you create an equation for the Sanchez family? Explain what each variable and number represents.