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Spreading a rumor

Keisha and Jenny have very bad habits or spreading rumors. They love to gossip.

- When Keisha spreads a rumor she tells 10 people of the first day and then tells 5 people each day after that
- When Jenny spreads a rumor she tells 3 people the first day and then doubles the amount of people she tells each day after that.

Keisha		Jenny	
Write a model for this situation:		Write a model for this s	situation:
Fill out the chart for the first 5 days:		Fill out the chart for th	ne first 5 days:
Days	# of people who know the rumor	Days	# of people who know the rumor
1		1	
2		2	
3		3	
4		4	
5		5	

- 1. Who has told more people the rumor initially? Keisha Jenny
- 2. Who has told more people the rumor on day 2? Keisha Jenny
- 3. Who has told more people the rumor on day 3? Keisha Jenny
- 4. Who has told more people the rumor on day 4? Keisha Jenny



Number of Days

- 5. How many people will Keisha have told the rumor to in 10 days? How many people will Jenny have told the rumor to in 10 days?
- 6. What kind of graph is Keisha's model? What kind of graph is Jenny's model?
- 7. If these girls were spreading a rumor about you, which girl would you rather be spreading the rumor? Why? (remember the secret is about you so you probably don't want that many people to know about it)

GET THIS PAPER CHECKED OFF BY A TEACHER. THEN USE THE BIG GRAPH PAPER TO MAKE A GRAPH OF JENNY AND KEISHA. LABEL EVERYTHING!

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Date:

Paying off a loan

Luke is paying off a loan on his brother who loaned him money to buy a new mountain bike. The bike cost him \$400. Luke's brother is giving him two options to pay him back

- Luke can pay back 7% of the cost every month
- Luke can pay back \$25 each month

Option 1		Option 2	
Write a model for this situation:		Write a moc	lel for this situation:
Fill out the chart for the first 5 months:		Fill out the c	chart for the first 5 months:
Month	Amount of loan remaining	Month	Amount of loan remaining
1		1	
2		2	
3		3	
4		4	
5		5	
6		6	
7		7	
8		8	
9		9	

- 1. By month 3 which option has the least amount of loan remaining? Option 1 Option 2
- 2. By month 9 which option has the least amount of loan remaining?

Option 1 Option 2



- 3. How long will it take to pay off the loan in option 2?
- 4. How much will Luke still owe in 16 months?
- 5. What kind of function is option 1? What kind of function is option 2?
- 6. Which option would you suggest that Luke take from his brother? Why?

GET THIS PAPER CHECKED OFF BY A TEACHER. THEN USE THE BIG GRAPH PAPER TO MAKE A GRAPH OF OPTION 1 AND OPTION 2. LABEL EVERYTHING!