

Graph a sketch of the scatterplot to represent each data set or problem situation. Sketch a trend line for the data

1.	<table border="1" style="margin: auto;"> <thead> <tr> <th>x</th> <th>y</th> </tr> </thead> <tbody> <tr> <td>-10</td> <td>-0.5</td> </tr> <tr> <td>-5</td> <td>-1</td> </tr> <tr> <td>-2</td> <td>-2.5</td> </tr> <tr> <td>-1</td> <td>-5</td> </tr> <tr> <td>0</td> <td>ERROR</td> </tr> <tr> <td>1</td> <td>5</td> </tr> <tr> <td>2</td> <td>2.5</td> </tr> <tr> <td>5</td> <td>1</td> </tr> <tr> <td>10</td> <td>0.5</td> </tr> </tbody> </table>	x	y	-10	-0.5	-5	-1	-2	-2.5	-1	-5	0	ERROR	1	5	2	2.5	5	1	10	0.5		<p>Domain: _____</p> <p>Range: _____</p> <p>Parent function represented by the data: _____</p> <p>Regression equation: _____</p> <p>Is the original data continuous or discrete?</p> <p>Is the trend line continuous or discrete?</p>
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3.	<p>Jason's grandfather deposited \$4,275 into an account to pay his college expenses. Jason withdrew \$475 each month to meet his costs. Create a table to represent the situation, then graph the data and draw a trend line.</p>		<p>Domain: _____</p> <p>Range: _____</p> <p>Parent function represented by the data: _____</p> <p>Is the original data continuous or discrete?</p>																				

4.

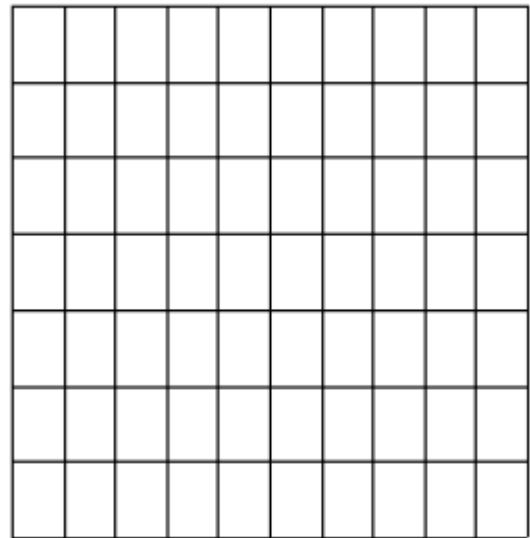
After taking a prescription medication, trace amounts stay in your system for an extended period of time. For example, on Wednesday, Daphne takes an allergy pill containing 128 milligrams of medicine. The next day, half of the medicine still remains in her system (64 mg).

Assume that each day, Daphne's body processes half of the medicine in her system from the day before. Extend this pattern using the table, and graph the resulting relationship.

Table of the data

Graph of the Data

Number of Days (since Wednesday)	mg of Medicine (in Daphne's system)
0	128
1	64
2	
3	
4	
5	
6	
7	



- What are the independent and dependent variables in the problem situation?
- What are the domain and range of the problem situation?
- Is the graph of the data increasing or decreasing?
- What does the point (3,16) represent in the problem situation?
- What point is used to the amount of medicine in Daphne's system on Wednesday?
- The amount of substance in the system is considered negligible if it falls to 0.125 mg. On what day would the substance in the system of the test subject be considered negligible?
- What parent function describes this data? Explain your reasoning.