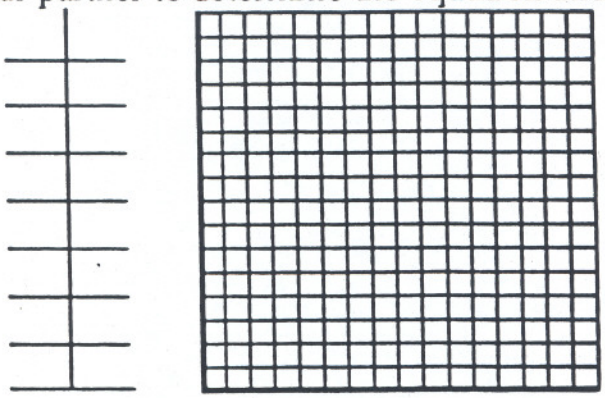
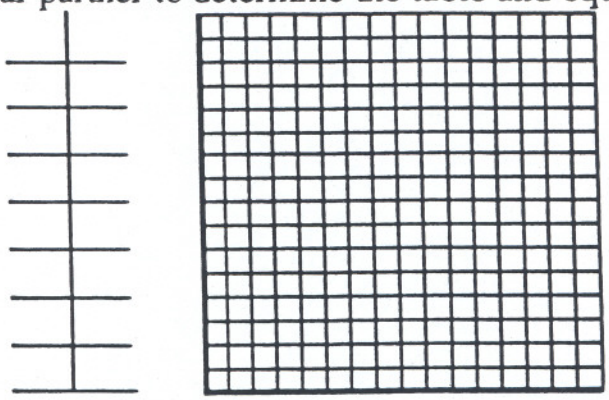
Reflect and Apply

1. Explain how to determine whether or not a data sequence is quadratic.

2. Construct a table of a real-world quadratic function of the form $y = ax^2$. Label the vertex. Ask your partner to determine the equation and graph.



3. Construct a graph of a real-world quadratic function of the form $y = ax^2$. Label the vertex. Ask your partner to determine the table and equation.



4. Consider the following data sets. Determine which would be the best model for each: linear, quadratic, exponential, or none of these. Show your decision process.

a.

Drop a Rock Over a Cliff	
Time (sec)	Height (feet)
0	500
1	484
2	436
3	356
4	244
5	100