# Algebra 1 <br> Healing Wounds 

Name $\qquad$

Hour $\qquad$

The normal healing of wounds can be modeled by a function. Below is a table showing the healing progress of a wound that happened on Tuesday.

| Day | Size $\left(\mathrm{mm}^{2}\right)$ |
| :---: | :---: |
| 1 <br> (Wednesday) | 70. |
| 2 <br> (Thursday) | 49. |
| 3 <br> (Friday) | 34.3 |
| 4 <br> (Saturday) | 24.01 |
| 5 <br> (Sunday) | 16.807 |

a. Sketch a graph of this data.
b. What kind of function is most reasonable for this data? Explain your reasoning.
c. Find the function that models this data.

d. What was the original size of the wound? Explain your reasoning.
e. Give the domain and range of this function. Explain your reasoning.
f. Give the domain and range of this function in terms of this situation. Explain your reasoning.
g. What will the area of the wound be on day 8 ?
h. On what day will the area of the wound be less than one square millimeter?

