Name $\qquad$ Period $\qquad$ Date $\qquad$

1. Shasta owns 10 baseball cards. Each week she plans to add 6 cards to her collection.
a. Create an input-output table that shows the number of cards in her collection over the first five weeks.
b. Plot the points that show the number of cards in

| Weeks <br> $x$ | Cards <br> $y$ |
| :---: | :---: |
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  | Shasta's collection over the first five weeks. Label both axes.

c. Write a function rule that describes the total number of baseball cards Shasta will own based on the number of weeks she has been collecting cards.
d. Determine how many weeks it will take before Shasta has 76 cards in her collection.

2. Before Henry went on a diet, he weighed 160 pounds. Each month he diets, he loses 5 pounds.
a. Create an input-output table that shows Henry's weight over the first five months.
b. Create a scatter plot that shows Henry's weight over the first five months. Label both axes.
c. Write a function rule that describes Henry's weight based on the number of months he has been dieting.
d. Henry's doctor told him a good weight for his age is 120 pounds. How many months will it take him to reach this weight?

| Months <br> $x$ | Weight <br> $y$ |
| :---: | :---: |
| 0 |  |
| 1 |  |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |



