Name:

Date:

Homework #2

Peyton and Paris own a video game company. After the first year of ownership the value of their company is $200. Mr. Billy determines that the value of their company will increase by $125.50 per year.

|  |  |
| --- | --- |
| Year | Company Value |
| 0 | $200 |
| 2 |  |
| 3 |  |
| 4 |  |
| 5 |  |

Complete the table showing the value of the company over the course of several years.

Write a sequence to show the increase in the value over the course of several years.

The sequence you wrote above has a common difference. Identify the common difference (recursive rule).

Let n represent the number of years that have passed. Write an expression (explicit rule) that can be used to determine the value of the company.

Use your expression to calculate the value of the company after 20 years.