Lesson 4: Identifying Proportional and Non-Proportional Relationships in Tables

Problem Set

1. Joseph earns $\$15$ for every lawn he mows. Is the amount of money he earns proportional to the number of lawns he mows? Make a table to help you identify the type of relationship.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Number of Lawns Mowed** |  |  |  |  |
| **Earnings (**$\$$**)** |  |  |  |  |

1. At the end of the summer, Caitlin had saved $\$120$ from her summer job. This was her initial deposit into a new savings account at the bank. As the school year starts, Caitlin is going to deposit another $\$5$ each week from her allowance. Is her account balance proportional to the number of weeks of deposits? Use the table below. Explain your reasoning.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Time (in weeks)** |  |  |  |  |
| **Account Balance (**$\$$**)** |  |  |  |  |

1. Lucas and Brianna read three books each last month. The table shows the number of pages in each book and the length of time it took to read the entire book.

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Pages Lucas Read** | $$208$$ | $$156$$ | $$234$$ |  |  |  |  | **Pages Brianna Read** | $$168$$ | $$120$$ | $$348$$ |
| **Time (hours)** | $$8$$ | $$6$$ | $$9$$ |  |  |  |  | **Time (hours)** | $$6$$ | $$4$$ | $$12$$ |

* 1. Which of the tables, if any, shows a proportional relationship?
	2. Both Lucas and Brianna had specific reading goals they needed to accomplish. What different strategies did each person employ in reaching those goals?