**2.5**

**2.5 Assignment Name\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**U.S. Shirts**

**Using Tables, Graphs, and Equations, Part 1**

 **1.** You want to save money for a new bicycle. You have already saved $50.00, and you are able to save $7.50 each week.

**a.** If you continue to save money at this rate, what will your total savings be in 3 weeks? What will your total savings be in 10 weeks? What will your total savings be in 6 months? (*Hint*: There are 4 weeks in 1 month.)

**b.** How did you determine the total savings in part (a)?

**c.** If you continue to save money at this rate, how long will it take you to save $275? How long will it take you to save $800? How long will it take you to save $1175?

**d.** How did you determine the number of weeks to save the amounts of money in part (c)?

**e.** Complete the table using the data of values from parts (a) and (c).

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| --- | --- | --- |
| **Quantity Name** | **Time****(in weeks)** | **Total Savings****(in dollars)** |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |
|  |  |  |

**f.** What are the variable quantities in this problem situation? Define the variables that can represent these quantities including each quantity’s units. Then, identify which variable is independent and which one is dependent.

**g.** Create a graph of the data from part (e). First, choose your bounds and intervals. Remember to label your graph clearly and name your graph.

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable Quantity** | **Lower Bound** | **Upper Bound** | **Interval** |
| Time |  |  |  |
| Total Savings |  |  |  |



**h.** Write an algebraic equation for the problem situation.

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