Math Grades 9 - 12
Tables/Graphing/Functions

MA.912.A.8.7
MA.912.A.8.1
MA.912.A.8.3
MA.912.A.8.7

The Brown Fairy Book
"Story of Wali Dad the Simple-Hearted"
Traditional folk tale

Reading Level: 8.6

Activity:

The following statement is made in the reading, *"He only earned by this five halfpence a day; but he was a simple old man, and needed so little out of it, that he saved up one halfpenny daily, and spent the rest upon such food and clothing as he required. In this way he lived for many years…"*

1. Fill in the table to represent the total amount saved at the end of each day.

Time (*t*)	**Total Money Saved (*m*)**
1 day	$.005
2 days	$.01
3 days	
4 days	
5 days	
6 days	

2. Write an equation that can be used to find *m* if given *t*.

3. Use the equation to predict how much money will be saved by the end of the 30^{th} day.

4. Graph the equation found in problem number 2. Label the axes appropriately.

5. Is the graph linear, quadratic, exponential growth, exponential decay, or none of these? Explain.