Linear and Exponential Stories

Name: _____ Date: _____

Mario and Luigi both want you to come and drive Go-Karts for their team. They will pay you in gold coins. Each one makes an offer:

Mario: I will give you 3 gold coins on the first day. Then, every day after that, I will pay you 3 times as much as I paid you the day before.

Luigi: I will give you 3 gold coins on the first day. Then, every day after that, I will pay you 20 more coins than I paid you the day before.

Who would you rather work for? Use the table below to help you decide.

Mario's Deal	Daily Wage	Luigi's Deal	Daily Wage
Monday		Monday	
Tuesday		Tuesday	
Wednesday		Wednesday	
Thursday		Thursday	
Friday		Friday	
Total Earnings		**Total Earnings**	

1) Whom would you rather work for? _____

Why? _____

2) Does the deal represent a linear or exponential function? Explain why.

Mario _____

Luigi   _____

3) Why does Mario's deal eventually become better than Luigi's deal?

4) Write an explicit function to represent each function.

Mario's Deal	Luigi's Deal