Name: Date: Period:

Making The Exponentially Better Decision =)

The task: Select and provide mathematical evidence to determine which account is most appropriate for a given situation:

Step 1: Decide what you are saving for (pick one of the following)

- I want to buy_____ worth _____ (must be more than $400)
- I want to have the most money possible by the time I am _____ years old (must be over 25!)

Step 2: Pick from the following three accounts to suit your needs:

Account 1:
Compounded quarterly with an initial investment of $300 at a rate of 5%.
Account 2:
Compounded continuously with an initial investment of $200 at a rate of 2.5%
Account 3:
Compounded continuously with an initial investment of $150 at a rate of 4%

Your final product must have the following:

1. **A function for each of the accounts you are deciding from.**
2. **Your decision about which account you would pick.**
3. **An explanation as to why you would pick your account using one of the following:**
    a. **A table of values**
    b. **A graph**
4. **Remember: You must explain why your choice is BETTER THAN THE OTHER TWO!**