

## Applications of Growth

Aunt Bessie (75 years old) is drawing up her will and wants to put you in it. She has said.



"My dear, you must not tell anybody but you are my favorite niece and so I am offering you a special thing in my will. You may choose which you would rather have:

- one million dollars today,
- five thousand dollars every month for the rest of my (Aunt Bessie's) life, or
- I will give you 2 cents today, 4 cents tomorrow, 8 cents the next day and keep doubling the new amount for a total of 28 days.

It is so important that you keep this secret that I will have to withdraw the offer if you tell anyone."

1. Without doing any mathematics which would you choose?
2. Do the math. Figure out all three options including any assumptions that you make. Be prepared to share your reasoning.