First, write an algorithm to settle the following question: A bank account starts out with $10,000. Interest is compounded at the end of every month at 6 percent per year (0.5 percent per month). At the beginning of every month, $500 is withdrawn to meet college expenses after the interest has been credited. After how many years is the account depleted?

Now suppose the numbers ($10,000, 6 percent, $500) were user-selectable. Are there values for which the algorithm you developed would not terminate? If so, make sure it always terminates. Here's how my program works:

```python
def financial_calculator(initial_balance, yearly_interest, monthly_withdrawal):
    total_months = 0
    remaining_balance = initial_balance
    while remaining_balance > 0:
        monthly_interest = remaining_balance * (yearly_interest / 12)
        remaining_balance += monthly_interest
        remaining_balance -= monthly_withdrawal
        total_months += 1

    return total_months

>>> Welcome to the financial calculator.
What's your initial balance? 10000
What's the yearly interest? 6
How much do you plan to withdraw monthly? 500
The account will last 1 year(s) and 9 month(s).
Ending balance will be: 62.2 dollars.

>>> Welcome to the financial calculator.
What's your initial balance? 10000
What's the yearly interest? 6
How much do you plan to withdraw monthly? 100
The account will last 11 year(s) and 6 month(s).
Ending balance will be: 97.09 dollars.

>>> Welcome to the financial calculator.
What's your initial balance? 10000
What's the yearly interest? 6
How much do you plan to withdraw monthly? 10
This will last forever.

>>> Welcome to the financial calculator.
What's your initial balance? 10000
What's the yearly interest? 6
How much do you plan to withdraw monthly? 50
The account will last 525 year(s) and 1 month(s).
Ending balance will be: 48.1 dollars.
```

Note especially how my program detects when the funds can last forever.