Graph 1

Bank Account

Deposits   Fees

A bank account has an initial balance of $500. For four months, $50 is deposited per month, rising to $100 in the fifth month and thereafter. The bank charges $20/month fees if the balance is below $1,000, and $10/month if the balance is $1,000 or more.

Bank_Account(t) = Bank_Account(t - dt) + (Deposits - Fees) * dt
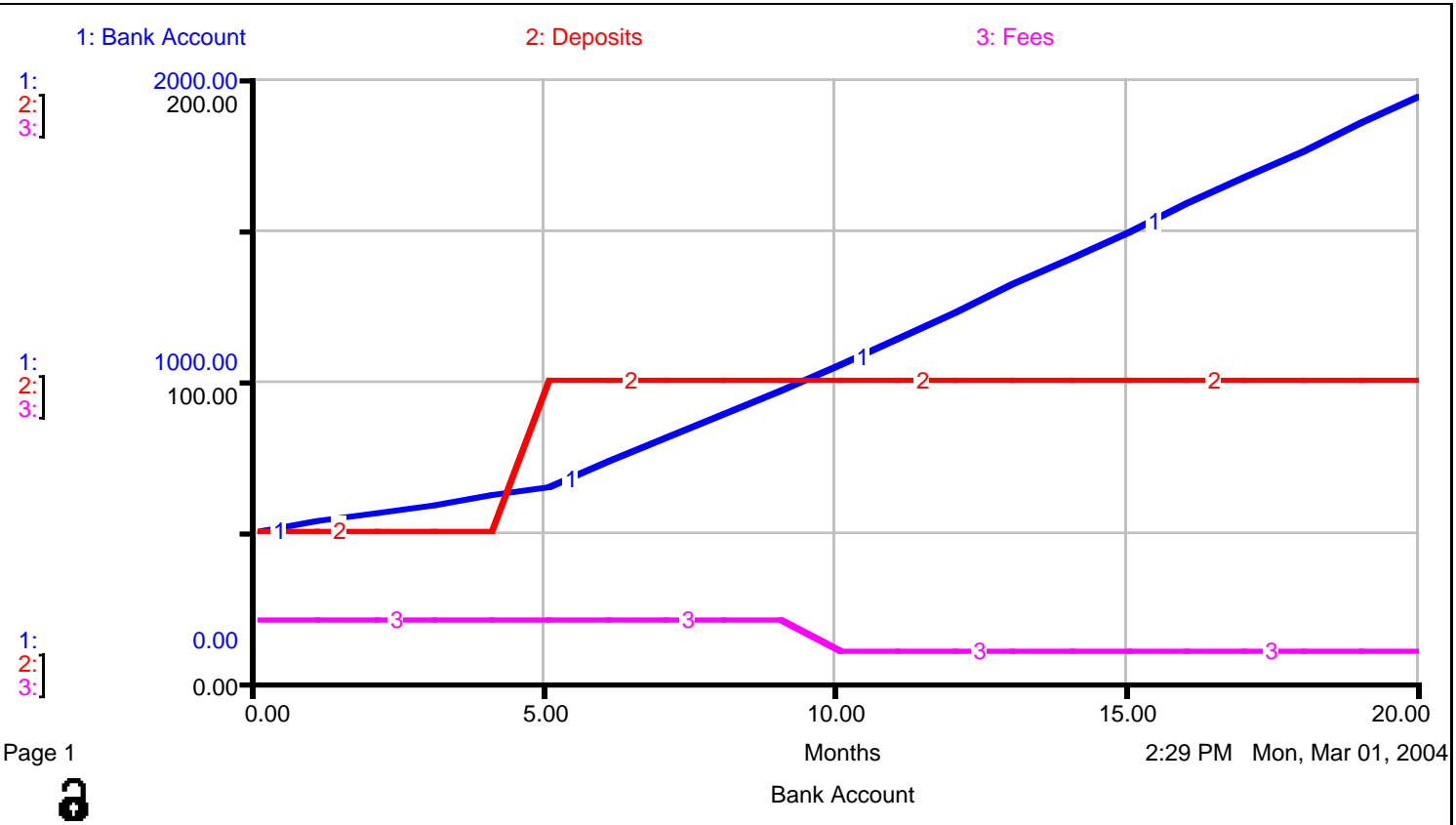INIT Bank_Account = 500 {dollars}

INFLOWS:
Deposits = 50+STEP(50,5) {dollars/month}
OUTFLOWS:
Fees = IF(Bank_Account<1000)THEN(20)ELSE(10) {dollars/month}

| 1: Bank Account | 2: Deposits | 3: Fees |

Bank Account

Syntax and Operation:

STEP(height,time)
STEP produces a permanent increase (decrease if negative) of amount "height" at time "time."

IF(Expression1)THEN(Expression2)ELSE(EXpression3)
Executes "Expression2" if "Expression1" is true, and otherwise executes "Expression3."