PRINT Your Name:

## Quiz - October 12, 2004

If Methuselah's parents had put $\$ 100$ in the bank for him at birth and he left it there, what would Methuselah have had at his death (969 years later) if interest was $8 \%$ compounded annually?

Answer: Interest is compounded one time per year, so the amount of money in the bank after $t$ years is $A(t)=A(0)(1+r)^{t}$; so $A(969)=100(1.08)^{969}$. If you are doing this at home you can use your calculator to see that $100(1.08)^{969}$ is approximately equal to $2.4413 \times 10^{34}$ dollars!

