What's the future value of $600 in a savings account, earning 4% apr, compounded daily, for 5 years?

$$S = R\left(\frac{\left(1+\frac{r}{m}\right)^{mt}-1}{\left(\frac{r}{m}\right)}\right) = R\left(\frac{(1+i)^n-1}{i}\right)$$

$$A = P\left(1+\frac{r}{m}\right)^{mt} = P(1+i)^n$$

$P = 600$ $\quad i = \frac{r}{m} = \frac{.04}{360}$

$r = .04$

$m = 360$ (or 365) $\quad n = mt = (360)(5)$

$t = 5$

$A = P(1+i)^n = 600\left(1+\frac{.04}{360}\right)^{(360)(5)}$

What's the future value of $600 per month deposited in a savings account, earning 4% apr, compounded monthly, for 5 years?

$FV = S = R\left(\frac{(1+i)^n-1}{i}\right)$

$= 600\left(\frac{\left(1+\frac{.04}{12}\right)^{12(5)}-1}{\left(\frac{.04}{12}\right)}\right)$

What's the present value of a savings account, earning 4% apr, compounded daily, if it accumulates to $600 after 5 years?

$A = P(1+i)^n$

$600 = P\left(1+\frac{.04}{360}\right)^{(360)(5)}$

Present Value of Annuity. How much did you borrow in the 1st place?

What's the PRESENT value of $600 per month deposited in a savings account, earning 4% apr, compounded monthly, for 5 years?

$R = 600$

$r = .04$

$m = 12$

$t = 5$

"S" because it's geometric series.

"FV" because it's future value & we already used "A" for Savings account "Accumulated amt."

$A = S$ (or $A = FV = S$)

$$P(1+i)^n = R\left(\frac{(1+i)^n - 1}{i}\right)$$

$$P\left(1+\frac{.04}{12}\right)^{12(5)} = 600\left(\frac{\left(1+\frac{.04}{12}\right)^{12(5)} - 1}{\frac{.04}{12}}\right)$$

Solve for "P"

P = original amount you'd need in a bank account in order to end up with same future value of a stream of payments of $600/mo.

S' 8.3

#93 June has 30 days

$a = 2$

$r = 2$

$\sum_{k=1}^{30} 1 \cdot 2^{k-1} = (1)\left(\frac{1-2^{30}}{1-2}\right)$

Doubles ever' day. Starts 1st day @ 2=1 sold.

$1 + 2 + 2 \cdot 2 + 4 \cdot 2 + 8 \cdot 2$

$= 1 + 2 + 2^2 + 2^3 + \cdots + 2^{29} =$