Day 9 HW Solutions: The Generous Banker

I made the following table to calculate the various answers. You should do the same.

	Interest Rate	Number of Compounding Periods in 20 years	Amount of Money After 20 Years
1. Interest compounded Annually	5%	20 (1 per year)	$1000(1.05)^{20}$ $= \$2653.30$
3. Interest compounded every 3 months(4 times/year)	1.25% or $\left(\frac{5\%}{4}\right)$	80 (4 per year for 20 years)	$1000(1.0125)^{80}$ $= \$2701.48$
5. Interest compounded every day (365 times per year)	$\frac{5\%}{365}$	$20 \cdot 365$ (365 times per year for 20 years)	$1000\left(1+\frac{.05}{365}\right)^{365 \cdot 20}$ $= \$2718.10$