Section 5.3 Part 2

Natural exponential

\[ f(x) = e^x \]

\[ e \approx 2.718 \]

\[ 2 \ln(1) = 2 \ln(e) = 2 \]

- \( n = 1 \) annually
- \( n = 2 \) semiannually
- \( n = 4 \) quarterly
- \( n = 12 \) monthly
- \( n = 365 \) daily

\[ A = P \left(1 + \frac{r}{n}\right)^{nt} \]

- \( A \) = future value
- \( P \) = present value
- \( r \) = decimal rate
- \( t \) = time in years
- \( n \) = # of times compounded in a yr.
APP/Finance/TVM Solver
N: nt = 10 = 10
I%: as a percent 6
PV: present value 8000
PMT: 0
FV: future value Alpha/enter
P/Y: n 1
C/Y: n 1

#77
A = Pe^{rt}
= 2000e^{(1.8)}
$4451.08

p.395 #81
$14,326.78

Compounded continuously
A = Pe^{rt}
future value
PV
years
as a decimal
growth
decay