

Using HP 10-BII for Compounding More Frequently Than Annually

(Using Example, Pg. 161)

Semiannual Compounding:

2 \blacksquare P/YR
100 [PV]
2 [N] \blacksquare [N] (or 2 \blacksquare [N])
8 [I/YR]
Press [FV] to get -116.99, which is \$116.99

Quarterly Compounding:

(think ahead: should I have more or less in my account if I calculate and add interest more often?)

4 \blacksquare P/YR
100 [PV]
2 [N] \blacksquare [N] (or 2 \blacksquare [N])
8 [I/YR]
Press [FV] to get -117.17, which is \$117.17 (slightly more with quarterly compounding)

Continuous Compounding

Step 1 – Enter interest rate in decimal form then multiply it by number of years
Step 2 – raise natural number e to that power by pressing \blacksquare [e^x] key (it's the 1 key shifted)
Step 3 – multiply by present value to get the future value

Example, bottom of page 162:

Key in: $0.08 \times 2 =$
Press \blacksquare [e^x] key to get 1.17351
Multiply: $\times 100 =$

You should get 117.351, or \$117.35

Note: to get the effective annual rate of 8% continuously compounded, enter:
 $0.08 \blacksquare$ [e^x] $- 1 = 0.033$ or 8.33%. *This is the fastest money can grow, given an 8% stated, or nominal, interest rate.*