

## Using HP 10-BII for Compounding More Frequently Than Annually

(Using Example, Pg. 161)

### Semiannual Compounding:

[ ] [C ALL]  
2 [P/YR]  
100 [PV]  
2 [N] [N] ( or 2 [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?)

[ ] [C ALL]  
4 [P/YR]  
100 [PV]  
2 [N] [N] ( or 2 [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 [  $e^x$  ] key (it's the 1 key shifted)
- Step 3 – multiply by present value to get the future value

*Example, bottom of page 162, showing these steps:*

Key in:  $0.08 \times 2 =$   
Press [  $e^x$  ] 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:  
 $0.08 [e^x] - 1 = 0.0833$  or 8.33%. *This is the fastest money can grow, given an 8% stated, or nominal, interest rate.*