Using the HP-17BII calculator for financial calculations

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This is a brief guide to using the HP17BII financial calculator. It does not replace your instruction booklet, nor does it replace actually practicing with the calculator. In the materials below, BOLD FACE indicates that you press a key with that label (or the arrow below that label on your screen) on your HP17BII. # below indicates that you press a number key on your HP17BII. Y indicates that you press the yellow-orange key. ^ indicates that you press an arrow key below that menu item. To exit any menu to the one “above” it, press EXIT.

**Setting up your calculator.** To set the number of digits after the decimal point, press DSP FIX # INPUT where # is the number of digits you want to display after the decimal point.

**Financial calculations.** To set the timings of cash flows or number of periods in a year, press Y EXIT ^FIN ^TVM ^OTHER. Then press ^BEG for “begin mode” or ^END for “end mode.” Enter the number of periods in a year # and press ^P/YR to change the number of periods per year (for example, enter 12 ^P/YR for monthly).

You should use the following sign convention when you work on financial calculations:

- Treat cash flows you are receiving as positive numbers.
- Treat cash flows you are paying out as negative numbers.

To turn a positive number into a negative number, enter the number on your keypad and press +/-.

For the calculations below, enter Y EXIT ^FIN ^TVM. In each of these calculations, remember the sign convention! If you have an error, either that or omitted data is the most likely cause.

<table>
<thead>
<tr>
<th>To calculate</th>
<th>First clear</th>
<th>Next enter</th>
<th>Next enter</th>
<th>Next enter</th>
<th>Next enter</th>
<th>Push for result</th>
</tr>
</thead>
<tbody>
<tr>
<td>Future value</td>
<td>Y INPUT</td>
<td>#^N</td>
<td>#^I%YR</td>
<td>#^PMT (if any). Annuity payments</td>
<td>#^PV (if any). Single payments now</td>
<td>^FV</td>
</tr>
<tr>
<td>Present value</td>
<td>Y INPUT</td>
<td>#^N</td>
<td>#^I%YR</td>
<td>#^PMT (if any). Annuity payments</td>
<td>#^PV (if any). Single payments at time N</td>
<td>^PV</td>
</tr>
<tr>
<td>Interest rate</td>
<td>Y INPUT</td>
<td>#^N</td>
<td>#^PMT (if any). Annuity payments</td>
<td>#^PV (if any). Single payments now</td>
<td>#^PV (if any). Single payments at time N</td>
<td>^I%YR</td>
</tr>
<tr>
<td>Annuity payment</td>
<td>Y INPUT</td>
<td>#^N</td>
<td>#^I%YR</td>
<td>#^PV (if any). Single payments now</td>
<td>#^PV (if any). Single payments at time N</td>
<td>^PMT</td>
</tr>
</tbody>
</table>

**To amortize a loan.** Do the steps for annuity payment as shown above. Then enter ^OTHER ^AMRT #^P (the number of periods you want to amortize in this interval).

- To display the amount of interest you paid in this interval, press ^INT.
- To display the amount of principal you paid in this interval, press ^PRIN.
- To display the remaining balance of the loan, press ^BAL.

To do the next interval of equal length, simply press ^NEXT and do the steps shown in the bullets above. If, at any period beginning, you want to amortize a different length next interval (for example, if you had 12 months of payments on your house loan after a short first period of 5 payments, you’d press #^P, where # was 12 in the second year. The first calculation would amortize 5 months of the loan, and the second calculation would amortize the next 12 months of the loan.

**To calculate IRR and NPV.** For the calculations below, enter Y EXIT ^FIN ^CLFO. Enter the cash flows as follows, remembering the sign convention:

- Clear previous data by pressing Y INPUT.
- To enter each flow, press # INPUT, remembering Flow (0) is the flow at period zero; Flow (1) is the first flow after time zero; Flow (2) is the second flow after time zero, etc.
- After Flows 1, 2, etc., you will be asked #TIMES(?)=. If the cash flow is repeated, enter the number of times it is repeated. Push INPUT.
- When you have entered the final cash flow, press the EXIT key.
- Push the ^CALC key.

  - If you are calculating an NPV or an NFV, enter the interest rate #^I% followed by ^NPV or ^NFV, depending on which you want to calculate.
  - If you are calculating an IRR, enter ^IRR.