

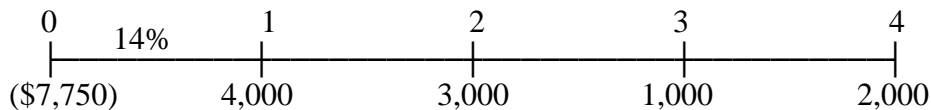
Texas Instruments BAI PLUS

COMPUTING NPV AND IRR:

Consider a project with the following characteristics:











Year	CF
0	(\$7,750)
1	4,000
2	3,000
3	1,000
4	2,000

If the firm's required rate of return is 14 percent, the cash flow time line for this project is:



To solve for the net present value (NPV), follow these steps:

- | | |
|---|---|
| Press CF | This opens the cash flow register. |
| Press 2ND CLR WORK | This clears any numbers that might be in the CF register from previous work. CFo = 0 should be displayed. |
| Enter 7,750, press + - , then press ENTER | CFo = -7,750 should be displayed |
| Press ↓ ; Enter 4,000 and press ENTER | C01 = 4,000 should be displayed |
| Press ↓ ; | F01 = 1 should be displayed; this indicates the frequency, or number of times, the C01 value occurs in in consecutive years. Because 4,000 is received in Year 1 but not in Year 2, F01 = 1. If 4,000 is receive in Year 1 and Year 2, you could change F01 to 2. |
| Press ↓ ; Enter 3,000 and press ENTER | C02 = 3,000 should be displayed |
| Press ↓ ; | F02 = 1 should be displayed; the interpretation of this number is the same as for F01. |

Press  ; Enter 1,000 and press 	C03 =	1,000 should be displayed
Press  ;	F03 =	1 should be displayed; the interpretation of this number is the same as for F01.
Press  ; Enter 2,000 and press 	C04 =	2,000 should be displayed
Press  ;	I =	0 should be displayed; this indicates that you must enter the interest rate, which is the required rate of return before the NPV can be computed.
Enter 14 and press 	I =	14 should be displayed
Press  ;	NPV =	0 should be displayed; the NPV has not been computed yet.
Press  ;	NPV =	-73.69341382 should be displayed
Press  ;	F02 =	1 should be displayed; the interpretation of this number is the same as for F01.

To solve for the project's internal rate of return (IRR), enter the cash flows as describe earlier, and then:

Press  ; then press 	IRR =	13.44 should be displayed; the
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The project is not acceptable, because $NPV < 0$ and $IRR < r = 14\%$