

## EXAM FM QUESTIONS OF THE WEEK

S. Broverman, 2006

### Week of June 12/06

At an effective annual rate of interest of  $i$ , a payment of 100 right now combined with the present value of a payment of 100 to be made 3 years from now has same total present value right now as the present value now of a single payment of 190 to be made 1 year from now. Find  $i$ .

**The solution can be found below.**

## **Week of June 12/06 - Solution**

The equation of value as of now is  $100 + 100v^3 = 190v$  .

We use the cashflow worksheet of the BA II PLUS calculator to solve this by setting  $CF_0 = 100$  ,  $C01 = -190$  ,  $F01 = 1$  ,  $C02 = 0$  ,  $F02 = 0$  ,  $C03 = 1000$  ,  $F03 = 1$  .  
Then calculate *IRR* .

The resulting interest rate is 17.21% .