XIRR CALCULATION EXPLAINED

The XIRR calculation is an internal rate of return available in MS Excel. It is largely based on cash flow within the account as opposed to the more fund performance based modified dietz calculations. The series of values must contain at least one positive and one negative value.

Note: A value of N/A will be returned when using this rate of return if the following conditions are not met:

1. Transactions must be more than one year old.
2. There must be at least one buy in the account.
3. An iterative technique is used for calculating XIRR. Using a changing rate (starting with guess), XIRR cycles through the calculation until the result is accurate within 0.000001 percent. If XIRR can't find a result that works after 100 tries, the N/A error value is returned.

Consider an investment that requires a $10,000 cash payment on January 1, 1992, and returns $2,750 on March 1, 1992, $4,250 on October 30, 1992, $3,250 on February 15, 1993, and $2,750 on April 1, 1993.

The internal rate of return would be calculated as follows:

$$0 = \sum_{i=1}^{N} \frac{P_i}{(1+rate)^{\frac{(d_i - d_1)}{365}}}$$

Where:
di = the last payment date.
d1= the 0th payment date.
Pi = the last payment.

In order to calculate the XIRR, the above formula is applied to every transaction in the account.

XIRR({-10000,2750,4250,3250,2750},{"1/1/92","3/1/92","10/30/92","2/15/93","4/1/93"},0.1) equals 0.373363 or 37.3363 percent