EXAM FM QUESTIONS OF THE WEEK

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Week of October 2/06

The effective annual interest rate for the coming year is 8%.
The effective annual, one-year forward rate of interest is 8.5%.
The effective annual three-year forward rate of interest is 9.0%.
You are given that the present value of a 4-year annuity immediate of 1 per year is 3.283969.
Find the effective annual two-year forward rate of interest.

The solution can be found below.

Week of October 2/06 - Solution

If the two-year forward rate is f, then the pv of the annuity is
$\frac{1}{1.08} + \frac{1}{(1.08)(1.085)} + \frac{1}{(1.08)(1.085)(1+f)} + \frac{1}{(1.08)(1.085)(1+f)(1.09)} = 3.283969$.

Solving for f results in $f = .0875$.