

Interest Rate Exercises

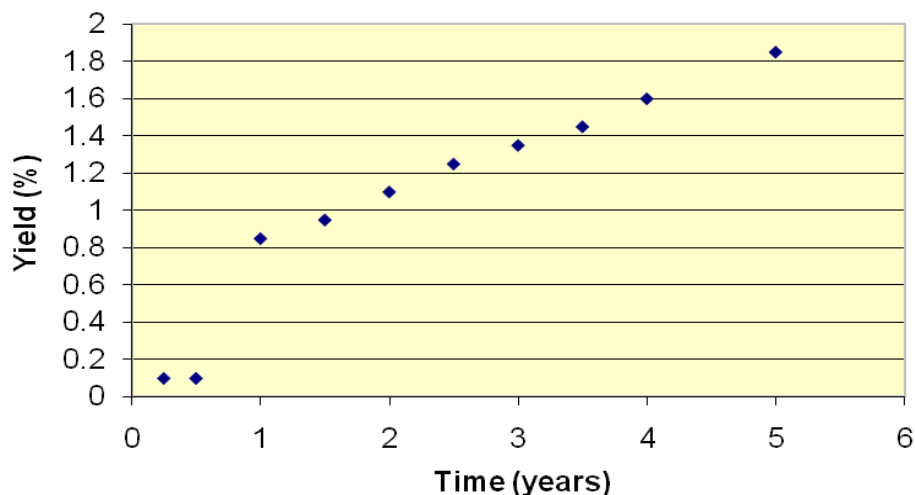
CD Rate Chart

Interest is compounded daily. Minimum Deposit: If you have no other ABC accounts, a minimum of \$10,000 is required to open a Certificate of Deposit. Persons who have ABC accounts may open a Certificate of Deposit with a minimum of \$2,500. Annual Percentage Yields (APYs) assume interest and principal remain on deposit until maturity. Substantial penalty for early withdrawal.

Term	Interest Rate	Annual Percentage Yield
91 days	.10%	.10%
6 months	.10%	.10%
12 months	.85%	.85%
18 months	.95%	.95%
24 months	1.09%	1.10%
30 months	1.24%	1.25%
36 months	1.34%	1.35%
42 months	1.44%	1.45%
48 months	1.59%	1.60%
60 months	1.83%	1.85%

Source: www.advantabankcorp.com (September 23, 2009)

Term Structure of Interest Rates (CDs)



Exercises:

1. Given the listed interest rates (compounded daily) verify the corresponding annual yield for a term of 24 months.
2. Suppose that you invest \$25,000 for a 3-year term and receive all interest at maturity. After three years, how much will your initial investment be worth?
3. You have \$15,000 available to invest. You do not expect to need access to these funds for 5 years. You decide to invest for two years now and, after the two years, you intend to then invest for three more years. What must the 3-year rate (stated as an annual yield) be in two years time for your investment to have more value after five years than just committing to a five year term now?
4. A home equity loan rate is advertised to be 6% APR. This advertised rate is an annual rate compounded monthly. What is the annual yield for this rate? Suppose you borrow \$100,000 at this rate for a term of 10 years. What will your monthly payments be?