## CD Rates

A Certificate of Deposit (CD) is a type of savings account that requires the customer to keep their money invested for a specific length of time before interest can be earned. If the customer leaves their money invested for the stated time, then interest is earned based on the Annual Percentage Yield (APY) (this is the interest rate).

1. What can you tell about the interest rates and the terms from Money Bank's CD Rates?

Hint: Look at how the minimum balance and interest rates (APY) change with each $C D$.
Write your response here.

Money Bank of Florida

|  | CD on the go | Easy CD | Yearly CD | Sitting CD |
| :---: | :---: | :---: | :---: | :---: |
| Term | 28 days | 9 months | 12 months | 18 months |
| Annual <br> percentage <br> yield (APY) | $0.009 \%$ | $0.03 \%$ | $0.08 \%$ | $0.15 \%$ |
| Opening <br> minimum <br> balance | $\$ 1,000$ | $\$ 5,000$ | $\$ 10,000$ | $\$ 10,000$ |

2. What can you tell about the interest rates and the terms from Bank of the $27^{\text {th }}$ State's CD Rates?

Hint: Look at how the term lengths and interest rates (APY) change with each CD.

## Write your response here.

Bank of the $27^{\text {th }}$ State

|  | CD on the <br> go | Easy CD | Yearly CD | Sitting CD | Long CD |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Term | 100 days | 15 months | 3 years | 5 years | 7 years |
| Annual <br> percentage <br> yield (APY) | $0.20 \%$ | $0.35 \%$ | $0.4 \%$ | $0.85 \%$ | $1.25 \%$ |
| Opening <br> minimum <br> balance | $\$ 250.00$ | $\$ 250.00$ | $\$ 250.00$ | $\$ 250.00$ | $\$ 250.00$ |

3. Calculate how much interest can be earned from each of the CDs from each of the banks based on the minimum required opening balances and record only the interest in the chart.
Ex. The minimum opening balance for a CD on the go from Money Bank is $\mathbf{\$ 1 , 0 0 0}$. The term/time is 28 days, or $\frac{28}{365}$ years. It has a rate of $0.009 \%$.

$$
\text { I = prt }=(1,000)(0.009)\left(\frac{28}{365}\right)=\$ 0.70
$$

|  | CD on the go | Easy CD | Yearly CD | Sitting CD | Long CD |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Money Bank <br> S | $\$ 0.70$ |  |  |  | Not Applicable |
| Bank of the 27 <br> State <br> ST |  |  |  |  |  |

4. Is it in the customer's best interest to buy a CD on the go from Money Bank or Bank of the $27^{\text {th }}$ State if they have $\$ 1,000$ ? Show how you determined your choice.

Write your response here.
5. Whose interest would be better served if $\$ 2,000$ were deposited in a CD on the go at Money Bank (the bank or the customer)? Explain your reasoning.

Hint: Is it better for the bank to have your $\$ 2,000$ deposit or for you to earn some interest on the deposit?

Write your response here.

## Car Loans

Now, let's look at some options for buying cars. Often, you pay a downpayment on a car and then pay the rest of the price in installments, which can be charged extra interest. For each of these problems, we will be assuming it is simple interest.

You want to buy a Shmerokey SUV for $\$ 32,999$. Your options are:

Option 1: No money down and 3.99\% APR for 72 months.

Option 2: $\$ 3,000$ down and $2.75 \%$ APR for 60 months.

Option 3: $\$ 4,500$ down and $1.99 \%$ APR for 60 months.

Record your calculations in the chart below to help compare the different options.

|  | What you owe <br> after down <br> payment | Interest You Pay <br> (interest on what <br> you owe) | Total you owe <br> (what you owe <br> after down <br> payment + <br> interest) | Monthly payment <br> amount |
| :--- | :---: | :---: | :---: | :---: |
| Option 1 |  |  |  |  |


| Option 2 |  |  |  |  |
| :--- | :--- | :--- | :--- | :--- |
| Option 3 |  |  |  |  |

Which option would you choose? Hint: look at the term lengths, monthly payments and rates.

Write your response here.

